Matematika

3

III qism



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I. V. Repyova

Matematika
3-sinf
III qism

Umumiy o‘rta ta’lim maktablari uchun darslik

Ta’limni rivojlantirish markazi huzuridagi Ilmiy-metodik kengash
tomonidan tavsiya etilgan

TASDIQLANGAN PLAGIATGA QARSHI TASDIQLANGAN

novda
edutainment

Toshkent – 2023

O‘ZBEKISTON RESPUBLIKASI
FARG‘ONA VILOYATI
RISHTON TUMANI
MAKTABGACHA VA MAKTAB
TA’LIMI BO‘LIMI
33-UMUMIY
O‘RTA TA’LIM
MAKTABI
№ 56
5. 01 2024

UO'K: 51(075.3)
KBK 22.1ya72
R 42

Repyova I. V.
Matematika. Umumiy o'rta ta'lim maktablarining 3-sinfi uchun darslik, III qism / I. V. Repyova. – Toshkent: "Novda Edutainment". 2023. – 132 b.

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Uyga vazifa

Eslatma: O'lchov birliklaridan O'zbekiston Respublikasi Vazirlar Mahkamasining "O'zbekiston Respublikasida kattalik birliklarini qo'llash to'g'risida"gi 10.01.2018-yil 21-sonli qaroriga muvofiq foydalanildi.

ISBN 978-9943-9716-3-9

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Salom, aziz bolajonlar!

Uchinchi qismda biz yangi geometrik obyektlar – to'g'ri to'rtburchaklar, parallelepipedlar va ularning elementlari bilan tanishamiz, shuningdek, aylana yasashni o'rganamiz va aylana bilan qanday geometrik shakllar bog'liqligini bilib olamiz. Biz sonli nurning yangi imkoniyatlarini ko'ramiz va uning matematik amallar bilan qanday bog'liqligini bilib olamiz. Biz zamonaviy texnologiyalardan foydalanganda bilimlarimizni qanday qo'llashni o'rganamiz. Yangi mavzularni o'rganar ekanmiz, mumtoz va zamonaviy san'at turlari bilan tanishamiz.



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Yondosh mavzu:
tarozilar.

Massa, tarozi,
grammlar, kilogrammlar.





1. Rasmlarga qarab qaysi obyekt eng og‘ir va qaysi biri eng yengil ekanini aniqlang.





Yengil jismlarning massasini kichikroq birliklar – grammlarda o‘lchash mumkin.

O‘qilishi: bir kilogramm ming grammga teng.
Yozilishi: 1 kg = 1000 g.

2. Grammlarda ifodalang va massalarning qiymatlarini o‘sish tartibida ayting.

20 kg 200 g 3000 g 2 kg 3 kg 200 g

3. Har bir predmetning massasini grammlarda aniqlang.



4. Savollarga javob bering.

a) Xaridning unumiy massasi qanday?

b) Kim ko'p va qancha ko'p yukni ko'tarib kelgan?



2 kg 960 g

4 kg 280 g

3 kg 750 g



2 kg 460 g

5. Kilogrammlarga aylantiring va ularni taqqoslang.

5 620 g ☐ 6 520 g

12 098 g ☐ 1 298 g

7 134 g ☐ 1 734 g

5 000 g ☐ 3 999 g

6. Grammlarga aylantiring va ularni hisoblang.

4 kg 309 g + 2 kg 293 g

8 kg 129 g – 5 kg 37 g

2 kg 760 g · 2

3 kg 227 g : 7

7. Bir xalta shakarning massasi 1 kg 980 g, bir xalta tariqning massasi esa bir xalta shakardan 3 marta kam. Bir xalta unning massasi shakar va tariqning birgalikdagi massasiga teng. Bir xalta unning massasi qancha?

8. Rasm bo'yicha ifodalar tuzing. Ularning qiymatlarini hisoblang.





75 g 125 g 120 g 250 g 10 g 150 g 50 g 250 g 100 g

O'zingiz uchun sabzavot va mevalar to'plamini o'ylab toping. Ularning massasi qancha bo'lishini ayting?

9. Ifodalarni yozing. Bo‘sh kataklarga tushirib qoldirilgan sonlarni shunday qo‘yingki, natijada to‘g‘ri tengliklar hosil bo‘lsin. Ifodalar ostidagi sonlar amallar natijalarini ko‘rsatadi.

□ − □ · □ + □ = 72

56 — 9 — 72

(□ − □) · □ + □ = 100

9 — 54 — 100

10. Ifodalarda qavslarni shunday qo‘yingki, natijada ularning qiymati 96 ga teng bo‘lsin.

24 + 40 : 8 − 3 · 9

5 + 52 − 45 · 13

11. Barcha tarozilar muvozanat holatda. 5 ta kvadratning massasini sharchalarda ifodalang.



12. Grammlarga aylantiring va hisoblang.

(6 kg 87 g + 1 kg 242 g) · 2

7 kg 920 g · 3 − 3 kg 402 g : 7

3 · (4 kg − 1 kg 159 g) + 2 kg 500 g · 2

5 kg 781 g : (480 − 21 · 17)

13. Aziza 1 kg 500 g olma, 1 kg 200 g olcha va olcha qancha bo‘lsa, shuncha qulupnay sotib oldi. U xarid qilgan barcha mevalarni 5 kg ga mo‘ljallangan xaltada olib keta oladimi?

Yondosh mavzu:
yuklarni tashish.

Massa, vazn,
tonna, sentner.





1. Har bir yuk qaysi transportda tashilishini aniqlang.



$28 \cdot (36 + 42) - 1\,178$



$(95 - 78) \cdot 79 + 1\,629$



$5\,978 - (768 : 4 + 1\,782)$

2 972



4 004



1 006

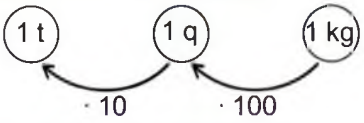




Og‘ir jismlarning massasini katta birliklar: tonna va sentnerlarda o‘lchash mumkin.

O‘qilishi: bir tonna ming kilogrammga teng.
Yozilishi: 1 t = 1 000 kg

O‘qilishi: bir sentner yuz kilogrammga teng.
Yozilishi: 1 q = 100 kg



2. Berilgan o‘lchov birligiga aylantiring.

2 000 kg = ☐ t 1 700 kg = ☐ q 320 q = ☐ t

3. Qulay massa birliklarida hisoblang.

243 kg + 4 t	12 q – 628 kg	27 t – 344 kg
7 t – 21 q	32 t + 12 q	4 t + 629 kg

4. Joylashtiring:

a) o'sish tartibida:

20 kg, 20 q, 20 t, 240 kg, 8 kg, 800 kg;

b) kamayish tartibida:

900 kg, 90 t, 390 kg, 3 q, 93 q, 30 q.

5. Massasi 2 q 86 kg bo'lgan dastgoh yog'och yashikda tashiladi. Yog'och yashikning massasi dastgohning massasidan 11 marta kichik. Umumiy yukning massasi qancha?



6. Yashikda yozilgan "netto" so'zi yashik ichidagi narsaning qadoqsiz sof massasini bildiradi. Olmaning sof massasini toping.







Yashik bilan birga massasi	Yashikning massasi	Massa "netto" – yashiksiz massasi
31 kg 200 g	3 kg 600 g	?

7. Agar baliqning netto massasi:

(5680 · 420 + 5789400) : 5000 – 1495 g;

bankaning massasi:

(71 · 5010 – 355455) : 15 g bo'lsa, konservali bankaning umumiy massasini toping.

8. Madina buvisiga jo'natma yubormoqchi. Jo'natmaning massasi 8 kg. Unga eng arzon yetkazib berish usulini tanlashga yordam bering.



Har bir kilogramm jo'natma uchun 67 000 so'm.



Jo'natma uchun 100 000 so'm + jo'natmaning har bir kilogrami uchun 23 000 so'm.



Hamma jo'natma uchun 300 000 so'm.

9. Batareykali fonarcha 15 000 so'm turadi. Yusuf o'z puliga fonarcha yoki 4 ta batareyka sotib olishi mumkin. Uning qancha puli bor? Batareyka qancha turadi?

10. Hisoblang.

4 q 7 kg + 2 t 98 kg – 1 t 361 kg

(5 t – 9 q 44 kg) : 4

3 · (7 kg 24 g – 5 kg 9 g)

11. Masalaning savollariga javob bering.

Onam qarindoshlari uchun yong'oq, mayiz va quritilgan o'rikdan jo'natma yig'di. U 3 kg 270 g yong'oq, yong'oqdan 1 kg 150 g ko'p mayiz, mayizdan 960 g kam quritilgan o'rik qo'ydi.

a) Jo'natmaning massasi qancha?

b) Jo'natmaning massasi 10 kg dan oshmasligi kerak. Onam bu qoidaga amal qilganmi?

Yondosh mavzu:
ko‘targichlar.

Tonna, sentner,
kilogramm, gramm, massa.





1. Predmetlarni ular massasining o‘sishi tartibida ayting.





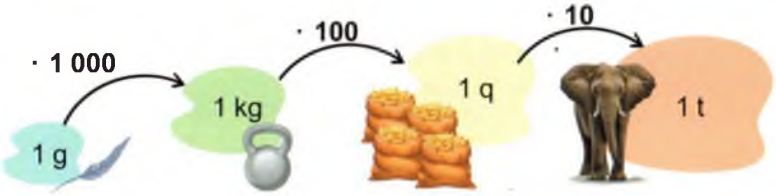




Ularning massasini o‘lchashda qanday birliklardan foydalandingiz?

Massa gramm, kilogramm, sentner va tonnalarda o‘lchanadi.





2. Berilgan massa birliklarida ifodalang.

4 656 kg = ☐ t ☐ kg
72 t 482 kg = ☐ kg
30 583 g = ☐ kg ☐ g
56 q 73 kg = ☐ kg
720 q = ☐ t
30 000 kg = ☐ t

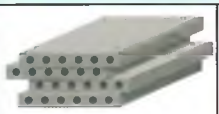
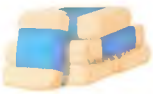
3. Eng kichik o‘lchov birligiga o‘tkazib hisoblang.

45 kg 29 g – 29 kg 342 g
(8 t 42 kg – 3 t 145 kg) · 7
5 t – 9 q 71 kg
83 t 550 kg : 3 + 23 q

4. Tenglamalarni yeching.

$x \cdot 4 = 5$ t 18 kg – 3 q 26 kg
$y : 3 = 2$ t 2 q 67 kg + 123 kg

5. Qurilish krani g'isht bloklari, beton plitalar va qoplangan qumlarni ko'taradi. Kranning yuk ko'tarish quvvati – kran ko'tarishga qodir bo'lgan massa 30 t.
Jadvaldan foydalanib,
a) yukning umumiy massasini;
b) kran bu yukni ko'tarish yoki ko'tara olmasligini aniqlang.

	 G'isht bloklari	 Beton plitalar	 Qoplangan qumlar
Miqdori	6	4	18
Bir birlikning massasi	1 110 kg	6 t 500 kg	50 kg

6. Ifodalarni taqqoslang.
(30 075 + 2 375) + 4 016 ☐ 30 075 + (2 375 + 4 019)
92 875 + 28 577 ☐ 28 574 + 92 871
(773 + 338) · 5 ☐ (773 – 338) · 5
106 · (34 · 23) ☐ (106 · 34) · 23

7. Ifodalarni hisoblang. Bu yerda qanday ko'targichlarning nomi yashiringan?
a) 567 234 : 9 + 24 · (83 668 – 82 474)



7 164	63 026	1 214	1 194	34 370	91 682	28 656
A	I	E	L	O	T	F

b) (123 – 4 · 8) · 3 : 7 + 16 + (48 – 27 – 6) · 5

15	39	130	273	55
A	A	R	L	O
21	91	75	32	48
K	S	T	E	M



8. Uyga 500 kg yuk ko'tara oladigan lift o'rnatilgan. Liftda uchta quruvchi ko'tarilmoqda. Ularning massasi 85 kg, 92 kg va 103 kg. Agar bir qop sementning massasi 20 kg bo'lsa, ular o'zlari bilan necha qop sement olishlari mumkin?

9. Sinfdoshingiz bilan musobaqalashing. Kim o'zining sehrli kvadratini tezroq to'ldirdi? Kim buni to'g'ri bajardi?

7		10	32
	8	9	32
			35
32	34	33	

21		15	49
	7		40
		20	50
43	43	53	

10. Ikkita cho'pni shunday olingki, natijada tenglik to'g'ri bo'lsin.



11. Ifodalar tuzing va ularning qiymatini toping.

a) 28477 soniga 13838 va 9934 sonlari ayirmasini qo'shing.
b) 548 va 89 sonlari ko'paytmasidan 42874 sonini ayiring.
d) 70377 va 69979 sonlari ayirmasini 18 marta orttiring.
e) 80160 sonini 16 va 5 sonlari ko'paytmasiga bo'ling.

12. Liftning yuk ko'tarish quvvati 1600 kg. Liftga har biri 25 kg bo'lgan 32 qop shakar va har biri 20 kg bo'lgan 48 yashik kungaboqar yog'i yuklandi. Lift me'yordan ortiq yuk ortilganligi haqida signal berdi. Liftga me'yordan qancha ko'p yuk ortilgan?

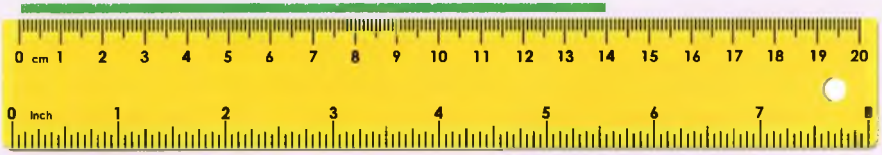
Yondosh mavzu:
maktab.

Metr, detsimetr,
santimetr, millimetr.





1. Rasmdagi kesma uzunligini aniqlang. Uni millimetr, santimetr, detsimetr va metrlarda ifodalang.



Angliya va AQSHda uzunlikni o'lchash uchun duym ishlatiladi. Chizg'ich yordamida duym santimetr va millimetrlarda qanday ifodalanishini aniqlang.

Kesmaning uzunligi – bu birlik kesmalarning unga mos keladigan (o'lchovlar) soni.

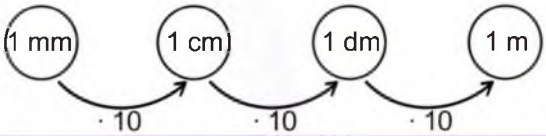
Turli vaqtlarda barmoq falangi uzunligi (duym yoki vershok), qo'l uzunligi (tirsak, arshin), tovon uzunligi (fut) uzunlik o'lchovi sifatida qabul qilingan.







Hozirgi vaqtda butun dunyoda odamlar umumiy uzunlik o'lchov birligi – metrdan foydalanadilar. Bir metrni teng qismlarga bo'lib, detsimetr, santimetr va millimetr olinadi.



2. Uzunliklarni berilgan o'lchov birliklarida ifodalang:
a) santimetrlarda: 400 mm, 3 dm 6 cm, 58 m 6 dm 2 cm.
b) millimetrlarda: 7 cm, 5 dm 7 cm 1 mm, 8 m 14 cm 3 mm.
d) detsimetrlarda: 70 m, 820 cm, 56 000 mm, 3 m 4 dm 60 cm.

3. Ifodalarni sxema bo'yicha yozing va ularning qiymatlarini hisoblang.

4 dm 5 cm	7 m 8 cm	2 dm 9 cm 7 mm
+	+	·
67 cm 3 mm	24 dm 6 mm	13
·	·	+
5	4	42 cm 1 mm
−	:	−
4 m 3 dm 5 mm	8	2 m 7 dm 2 mm

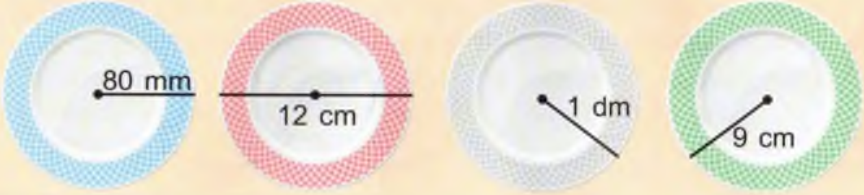
4. To'g'ri plastmassa chizg'ichning massasi 25 g, uchburchak chizg'ichniki esa 30 g. Maktab uchun 2300 ta uchburchak chizg'ich, undan ikki marta ko'p to'g'ri chizg'ich sotib olindi. Xaridlarning umumiy massasi qancha? Bu xaridlarni maktabga olib borish uchun qanday transportga buyurtma berish kerak?


20 kg gacha

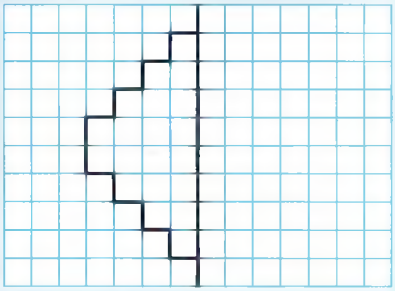

21 kg dan 100 kg gacha


101 kg dan 300 kg gacha

5. Qaysi likopchaning diametri eng katta?



6. Chiziqni daftaringizga kataklar bo'yicha ko'chirib chizing. O'ng tomonda simmetrik chiziqni tasvirlang. Hosil bo'lgan shaklning perimetrini katak va santimetrlarda toping.



7. Maktab xonasining bo'yi 7 m 15 cm, eni esa 2 m 8 dm qisqa. Xonaning perimetri bo'ylab plintus yotqizilishi kerak, eni 85 cm bo'lgan eshik bundan mustasno.
a) Qancha plintus sotib olish kerak?
b) Plintus 2000 mm li planka holida sotiladi. Xona uchun nechta planka kerak bo'ladi?

8. O'tgan yili maktabda qizlar o'g'il bolalardan 42 nafar ko'p o'qigan. Bu yil maktabga yana 18 nafar o'g'il va 15 nafar qiz bola qabul qilindi. Maktabda kimlar ko'proq va qanchaga ko'p?

9. Ko'rsatma bo'yicha amallarni bajaring.
a) 4 m 27 cm ga 72 dm 3 cm ni qo'shing.
b) Hosil bo'lgan natijani 50 marta kamaytiring.
d) Hosil bo'lgan natijaga 35600 mm ni qo'shing.
e) Hosil bo'lgan natijani metr, detsimetr va santimetrlarda ifodalang.
f) Olingan natijadan 1 m 4 dm 7 cm ni ayiring.

10. Maktabda 876 nafar o'g'il bola va ulardan 48 nafar ko'p qiz bola o'qiydi. Dushanba kuni 27 nafar o'g'il bola va ulardan uch marta kam qiz bola maktabga kelmadi. Dushanba kuni maktabda qancha o'quvchi bo'lgan?

Yondosh mavzu:
temir yo'l.

Metr, kilometr.



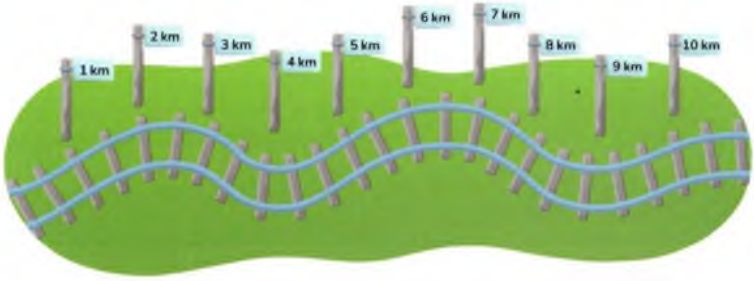


1. 3-sinf o'quvchisining qadam uzunligi taxminan 35 cm. Madina maktabgacha 4780 qadam yurdi. Madina necha metr yurdi?

Juda katta uzunliklar kilometrlarda o'lchanadi.

O'qilishi: bir kilometr ming metrga teng.
Yozilishi: 1 km = 1000 m.





2. Berilgan uzunlik birliklarida ifodalang.

8 000 m = ☐ km	4 078 m = ☐ km ☐ m	3 km = ☐ dm
7 km 233 m = ☐ m	56 000 km = ☐ km	7 200 dm = ☐ m

3. Eng kichik o'lchov birligiga o'tkazib hisoblang.

1 km 239 m + 8 739 m	4 km 34 m – 289 030 dm
1 km 178 m · 39	80 km 976 m : 14
(4 km 23 m – 2 km 7 m) · 4	(5 km 198 m + 3 km 112 m) : 3

4. Uydan vokzalgacha bo'lgan yo'lning uzunligi 2 km 400 m. Qor yog'gandan so'ng, uning ustiga ikki xil oyoq izlari zanjiri tushgan. Birinchi zanjirda 8000 qadam, ikkinchi zanjirda esa 4000 ta qadam bor. Har bir odamning qadam uzunligi qancha? Ularning bo'yi haqida xulosa qilish mumkinmi?



5. Ifodalar tuzing va ularning qiymatini hisoblang.

a) Yo'lovchilar vagonida 9 ta kupe bor. Har bir kupeda 4 ta yotoq o'rni mavjud. Bunday vagonga qancha yo'lovchi joylashishi mumkin?

b) Yo'lovchi poyezdi 4 soatda 340 km yo'lni bosib o'tadi. U 6 soatda necha kilometr yo'lni bosib o'tadi?

d) Toshkent–Buxoro–Urganch–Xiva yo'li 1160 km ni tashkil etadi. Buxoro–Urganch–Xiva yo'li esa 695 km qisqa. Urganchdan Xivagacha bo'lgan yo'l 40 km. Buxorodan Urganchgacha bo'lgan yo'l qancha?

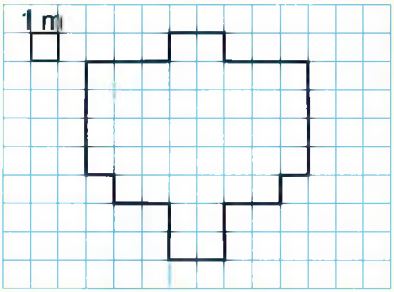
6. Ushbu tengliklardagi noma'lum bo'linuvchilarni toping.

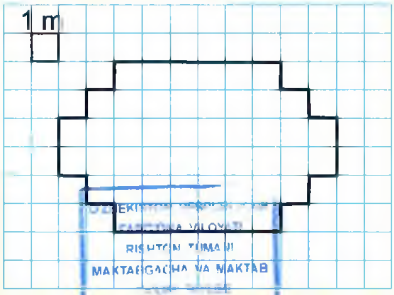
$x : 4 = 9$ (qold. 2) $\quad m : 7 = 2$ (qold. 3)

$t : 6 = 3$ (qold. 5) $\quad y : 2 = 8$ (qold. 3)

Topshiriqlarning qaysi birida qoldiqli bo'lish noto'g'ri berilgan?

7. Katakli maydonda ikkita shakl tasvirlangan. Qaysi shaklning perimetri katta ekanini aniqlang.





MAKTABGACHA VA MAKTAB
33-UMUMIY
O'RTA TA'LIM
MAKTABI

8. Ifodalarni hisoblang. Qadimda katta masofalar qanday birliklarda o'lchangan?

a) 45 000 : 500 · (5 179 – 4 951) + 11 923

P 900	**I** 90	**L** 20 520	**T** 53 103
A 21 467	**K** 800	**M** 228	**Y** 3 244

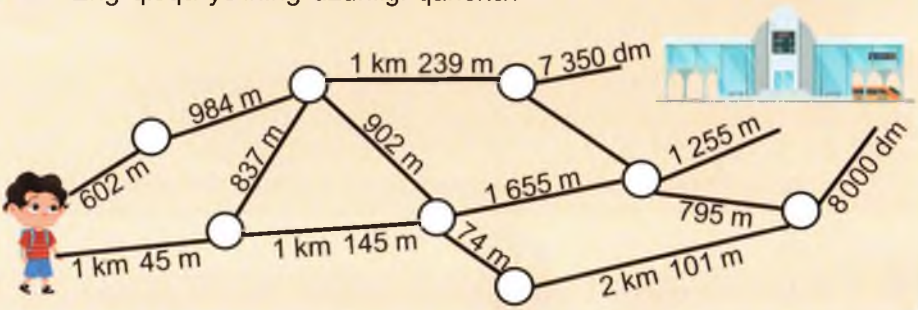
b) 8 · (56 + 61 · 4) + 728 – (321 – 199)

I 3 006	**A** 300	**M** 20 520	**I** 2 400
CH 244	**K** 800	**Q** 122	**R** 3 128

9. Ifodalar yozing va ularning qiymatlarini hisoblang.

a) 5780 soni bilan 900 va 12 sonlari bo'linmasining yig'indisi.
b) 405 va 18 sonlari ko'paytmasi bilan 3976 soni ayirmasi.
d) barcha raqamlar ko'paytmasi.
e) barcha raqamlar yig'indisi.

10. Jasurga bekatgacha eng qisqa yo'lni tanlashda yordam bering. Eng qisqa yo'lning uzunligi qancha?



11. Eng kichik o'lchov birligiga o'tkazib hisoblang.

7 410 m + 2 km 35 m
8 km 15 m – 2 367 m
7 km 128 m : 9
7 · 3 km 19 m

12. Poyezd 20 minutda 16 km 280 m masofani bosib o'tadi. Bu yo'lga nisbatan 44 km 770 m uzun yo'lni u qancha vaqtda bosib o'tadi?

Yondosh mavzu:
baliq ovi.

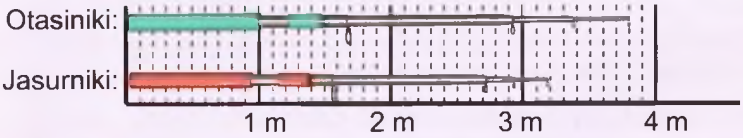
Kilometr, metr, detsimetr, santimetr, millimetr.





1. Jasur otasi bilan baliq oviga otlandi. Aniqlang:

a) kimning qarmog‘i uzun va qancha uzun?



b) kimning termosi baland va qancha baland?



Jasurniki:
19 cm 9 mm + 3 cm 9 mm



Otasiniki:
41 cm 1 mm – 14 cm 8 mm

d) Kimning rukzagi og‘ir va qancha og‘ir?



Jasurniki:
4 kg 267 g + 3 kg 578 g

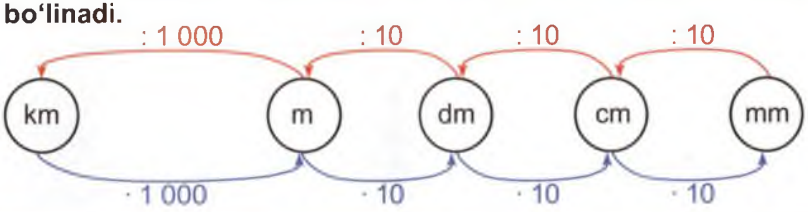


Otasiniki:
18 kg 400 g – 8 kg 986 g

Qiymatni bir o‘lchov birligidan boshqasiga o‘tkazish uchun qoidani eslab qolish kerak:

a) katta birlikdan kichik birlikka o‘tishda kerakli qiymatga ko‘paytiriladi;

b) kichik birlikdan katta birlikka o‘tishda esa kerakli qiymatga bo‘linadi.



2. Ifodalang:

a) millimetrlarda:

3 cm	2 cm 8 mm	5 m	4 dm 3 mm

b) santimetrlarda:

7 dm	3 m 9 dm 2 cm	470 mm	3 km

d) detsimetrlarda:

2 m	3 m 1 dm	4 km	1 300 mm

e) kilometrlarda:

8 000 m	30 000 dm	700 000 cm	23 000 m

3. Ifodalar natijalarini eng kichik o‘lchov birliklariga o‘tkazing. To‘g‘ri qiymatlarga mos keladigan harflarni to‘plang. Bu predmetlar nima deb ataladi? Ular nima uchun kerak?

a) 1 dm 3 cm 4 mm + 5 dm 8 cm 6 mm

QAL	QA	BL
620 mm	619 mm	720 mm

b) 8 m 7 cm – 23 dm 4 cm

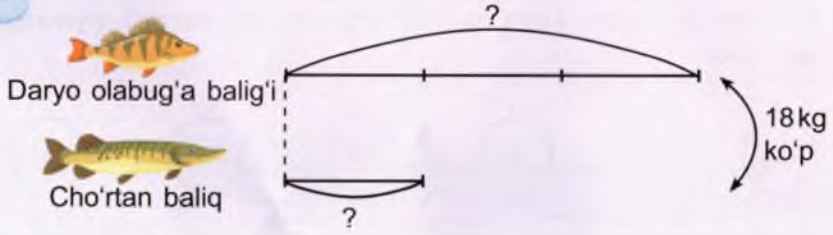
ES	RM	QOV
573 cm	636 cm	843 cm

d) (5 km 329 m – 4 km 48 m) : 3

OQ	NA	UCH
283 m	427 m	1 627 m



4. Sxema bo‘yicha masala o‘ylab toping va uni yeching.



5. Kecha uch keksa baliqchi 78 ta baliq tutib, o‘zaro teng bo‘lib olishdi. Ikki yosh baliqchi bugun 54 ta baliq tutib, ular ham o‘zaro teng bo‘lib olishdi. Qaysi baliqchi ko‘proq baliq oldi: keksa baliqchimi yoki yosh baliqchimi?

6. Baliqchiga qarmog‘ini yig‘ishga yordam bering. Ifodalar yozing va ularni hisoblang.



a) Dasta qarmoqning asosiy qismi. Baliqchi uni har birining uzunligi 40 cm bo‘lgan 6 ta naychadan yasadi. Agar yig‘ish paytida uning uzunligi naychalarning umumiy uzunligidan 25 cm qisqa bo‘lsa, dasta uzunligini toping.

b) Baliq ovlash leskasining butun uzunligi 10 m. Uning bir qismi g‘altakka o‘ralgan, 2 m 10 cm uzunlikdagi qismi qarmoq bo‘ylab cho‘zilgan, qolgan qismi qarmoqdan 86 cm pastga tushgan. G‘altakka o‘ralgan leska qismining uzunligi qancha?

d) Qalqovuch ilmoqdan 38 cm masofada leskaga o‘rnatilgan. Ilmoqdan 168 mm masofada leskaga cho‘ktirgich bog‘langan. Qalqovuch bilan cho‘ktirgich orasidagi leska uzunligi qancha?

7. Baliqchi 15 ta baliq tutdi. U tutgan baliqlarini miqdorlari har xil bo‘lgan 5 ta to‘pga ajratdi. Har bir to‘pda nechta baliq bor?

8. Eng kichik o‘lchov birligiga o‘tkazib hisoblang.

(3 km 282 m + 6 km 126 m) : 12 – 234 m 7 dm

4 · (8 m 6 dm 2 cm – 2 m 17 cm) + 24 dm 1 cm

9. Baliqchi birinchi kun 5 kg 230 g baliq ovladi, bu ikkinchi kundagiga nisbatan 2 marta, uchinchi kundagiga nisbatan esa 1 kg 105 g ko‘p. Baliqchi uch kunda jami necha kilogramm baliq ovlagan?

Yondosh mavzu:
yo'l texnologiyalari.

Kvadrat metr,
kvadrat detsimetr,
kvadrat santimetr.





1. To'g'ri to'rtburchak shaklidagi maydonni qoplash uchun turli shakldagi plitkalar ishlatilgan. Buning uchun qancha katta va qancha kichik plitkalardan foydalanilgan? To'g'ri to'rtburchaklar nechta? Qaysi biri ko'proq ishlatilgan: kvadrat shaklidagilarmi yoki to'g'ri to'rtburchak shaklidagilarmi?



2. Xuddi shu maydonga turli o'lchamdagi kvadrat plitkalar yotqizilgan. Qaysi holatda ko'proq plitka kerak bo'ladi? Agar eng kichik plitka tomoni 1 dm bo'lgan kvadrat bo'lsa, maydonning yuzi qanday?









Shaklning yuzi – bu uning ichki sohasiga joylashtirish mumkin bo'lgan o'lchovlar soni. Ko'pincha birlik o'lchov sifatida tomonlari 1 mm, 1 cm, 1 dm, 1 m bo'lgan kvadratlar olinadi. Bunday kvadratlarning yuzi, mos ravishda, 1 mm^2, 1 cm^2, 1 dm^2, 1 m^2 deb belgilanadi.

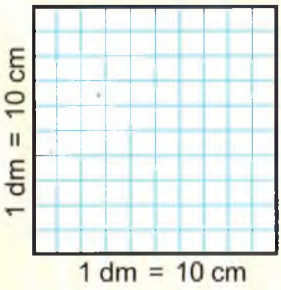
3. a) Rasmdan foydalanib, 1 kvadrat detsimetrda necha kvadrat santimetr borligini ayting. Buni qanday aniqladingiz?

b) Bo'sh joylarni to'ldirib, daftaringizga yozing.

$1\,cm^2 = \ldots mm^2$

$1\,dm^2 = \ldots cm^2 = \ldots mm^2$

$1\,m^2 = \ldots dm^2 = \ldots cm^2 = \ldots mm^2$



4. Taqqoslang.

$5\,dm^2$ ☐ $30\,cm^2$	$75\,dm^2$ ☐ $7\,m^2\,5\,dm^2$	$4\,dm^2$ ☐ $41\,cm^2$
$6\,dm^2$ ☐ $7\,000\,mm^2$	$21\,cm^2$ ☐ $2100\,mm^2$	$200\,mm^2$ ☐ $2\,dm^2$

5. Hisoblang. Qulaylik uchun eng kichik o'lchov birligiga keltiring.

$33\,m^2\,75\,dm^2 + 42\,m^2\,18\,dm^2 - 19\,m^2\,67\,dm^2$

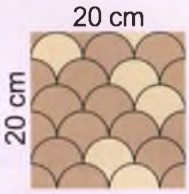
$5\,dm^2\,3\,cm^2 \cdot 4 - 18\,dm^2\,96\,cm^2 : 8$

$426\,cm^2 : 10 + 4 \cdot (5\,cm^2\,32\,mm^2 - 278\,mm^2)$

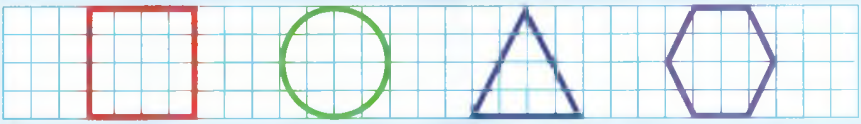
6. Avtobus bekati pavilyonining to'g'ri to'rtburchak shaklidagi maydoni kafel bilan qoplanishi kerak. Maydonning bo'yi 8 m, eni esa bo'yidan 4 m 6 dm qisqa. Toping:

a) ushbu maydonning yuzini;

b) bu maydonga shunday plitkalardan nechta kerak bo'lishini.



7. Qaysi shaklning yuzi eng katta? Nima uchun?

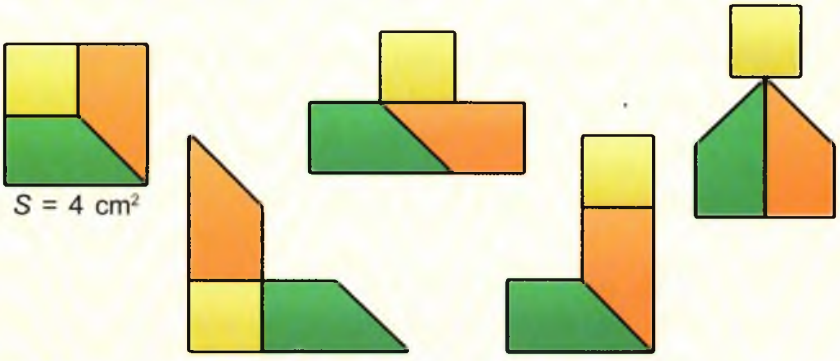


8. Hisoblang. To'g'ri burchakli parallelepiped yoki kub shaklidagi toshlar yotqizilgan yo'l qanday ataladi?

A	400 : 50 · 20	**S**	(180 : 3 – 17) · 5
B	6000 : (72 + 28)	**T**	8000 : (80 : 10)
K	93 – 12 · 7 + 322	**U**	175 · 1 + 602 · 2
R	42 · 20 – 17 · 6	**CH**	1000 – (222 · 4 + 19)

60	738	1379	215	93	160	1000	331	160

9. Bolalar o'yin maydonchalari turli rangdagi uchta to'rtburchakdan iborat shakl ko'rinishida tuzilgan.
a) Qaysi shaklning yuzi eng katta?
b) Har bir shaklning yuzini toping.



10. Eng kichik yuz o'lchov birligiga o'tkazib hisoblang.
42 dm² 26 cm² – 15 dm² 63 cm² + 14 dm² 19 cm²
8 cm² 1 mm² : 9 + 3 cm² 6 mm² : 6
300 · (4 dm² – 193 cm²)

11. Ikkita yo'lkaga plitka yotqizish kerak. Bitta yo'lkaning uzunligi 17 m 40 cm, kengligi esa 1 m 48 cm. Ikkinchi yo'lkaning uzunligi 15 m 80 cm, kengligi esa 1 m 12 cm. Qaysi yo'lkaning yuzi katta va qancha katta?

Yondosh mavzu:
qishloq xo'jaligi.

Ar, gektar.





1. Rasmdan qaysi maydon eng katta yuzga ega ekanligini aniqlang. Nima uchun?







2. Bo'yi 2 450 m, eni esa bo'yidan 7 marta qisqa bo'lgan maydonning yuzini toping. Yuzning qiymatida nechta to'liq yuzlik bor?



Katta maydonlar arlar va gektarlarda o'lchanadi.
1 ar 100 kvadrat metrni o'z ichiga oladi.
1 a = 100 m^2
1 gektar 10 000 kvadrat metrni o'z ichiga oladi.
1 ha = 100 a = 10 000 m^2

3. Ifodalang:
a) kvadrat metrlarda: 7 gektar, 12 ar, 3 gektar 5 ar;
b) arlarda: 5 gektar, 4 500 m^2, 30 000 m^2.

4. Taqqoslang.

230 m^2 ☐ 2 a	18 ha ☐ 1 800 m^2	310 a ☐ 3 ha
62 a ☐ 620 m^2	70 000 m^2 ☐ 8 ha	42 a ☐ 4 ha

5. Dehqon o'z dalalariga bug'doy, makkajo'xori, loviya ekdi. Ekin ekilgan maydonlarning yuzlari jadvalda ko'rsatilgan. Fermerga tegishli yerning umumiy yuzi qancha?

		
7 ha 19 a	3 ha 5 a ko'p	4 marta kam

6. To'g'ri burchakli ko'pburchaklarni tanlang.



7. Sonlarni yozing:

a) 5ta millionlik 287ta minglik 456ta birlik;
b) 12ta millionlik 400ta minglik 830ta birlik;
d) 604ta millionlik 5ta minglik 32ta birlik;
e) 56ta millionlik 5ta birlik.

8. Hosilni xona qo'shiluvchilari yig'indisi ko'rinishida yozing. Har bir maydondan jami necha to'liq tonna hosil yig'ib olindi? Necha to'liq sentner hosil yig'ib olindi?



Suli – 176034kg



Javdar – 252451kg



Qora bug'doy – 123250kg

9. Hosildorlik – bu bir birlik maydondan olinadigan hosilning hajmi. Masalan, kartoshka hosildorligi 270 q/ha bo'lsa, bu gektaridan 270 sentnerdan hosil olinganligini anglatadi. Bo'yi 2 km, eni 500 m bo'lgan maydondan necha tonna kartoshka olinadi?

10. Murakkab masala. Har bir band uchun ifodalar yozing va ularning qiymatini hisoblang.

a) Birinchi maydondan t sentner, ikkinchi maydondan esa b sentner kam don yig'ib olindi. Ikkinchi maydondan qancha don yig'ib olingan?

b) Hamma don elevatorda saqlandi. Elevatorda necha sentner don bor?

d) Bu kilogrammlarda qanchani tashkil etadi?

e) Elevatordagi barcha don 50 kilogrammlik qoplarga solindi. Donlar nechta qopga joylangan?



Don saqlanadigan elevator

11. Bir uyum pichanni ot bir oyda, echki ikki oyda, qo'y uch oyda, quyon olti oyda yeydi. Barcha hayvonlar bu pichanni birgalikda qancha vaqtda yeydi?

12. Eng kichik o'lchov birligiga o'tkazib hisoblang.

45 ha 12 a + 81 ha 38 a – 16 ha 87 a

95 a : 10 + 235 m^2 · 7

12 ha – 17 m^2 · 5 · 8

13. Maydonning yuzi 87 ha. Birinchi kun 23 ha 16 a maydon, ikkinchi kun birinchi kundagidan 1 ha 45 a ko'proq maydon shudgor qilindi. Uchinchi kunga qancha gektar maydonni shudgorlash qoldi?

Yondosh mavzu:
quroq tikish.

Kvadrat metr,
kvadrat detsimetr,
kvadrat santimetr.





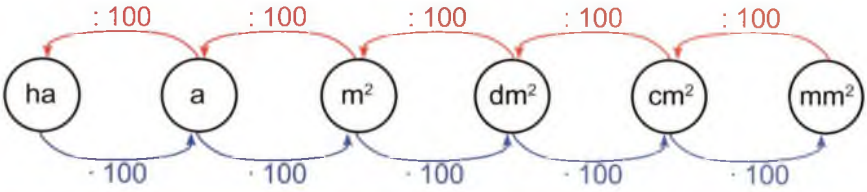
1. Madina quroq tikishga qiziqib qoldi. Yostiq uchun u 10 cm × 10 cm o'lchamdagi bir xil parchalarni tayyorladi. Agar yostiqning tomonlari rasmdagi kabi bo'lsa, u qanday o'lchamda bo'ladi? Yostiq uchun qancha parcha ishlatiladi?



2. Madina tomonlari 1 dm bo'lgan xuddi shunday kvadrat parchalardan quroq ko'rpa tikmoqchi. Ko'rpaning har ikki tomoni quroqdan tikiladi. Ko'rpaning o'lchamlari 180 cm × 220 cm. Unga nechta parcha kerak bo'ladi?

Barcha yuz birliklari o'zaro bog'langan





3. Qulay o'lchov birligiga keltirib hisoblang.

23 ha 56 a + 183 000 m^2 – 2 760 a

45 m^2 30 dm^2 : 6 + 1 200 cm^2 · 82

(400 000 mm^2 – 30 dm^2 4 cm^2) · 501

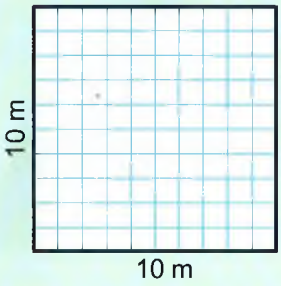
4. a) Rasmdan foydalanib, bu kvadratda necha ar borligini ayting. Buni qanday aniqladingiz?

b) Bo'sh joylarni to'ldirib, daftaringizga yozing.

1 m^2 = ... dm^2 = ... cm^2 = ... mm^2

1 a = ... m^2 = ... dm^2 = ... cm^2

1 ha = 1 a = ... m^2 = ... dm^2

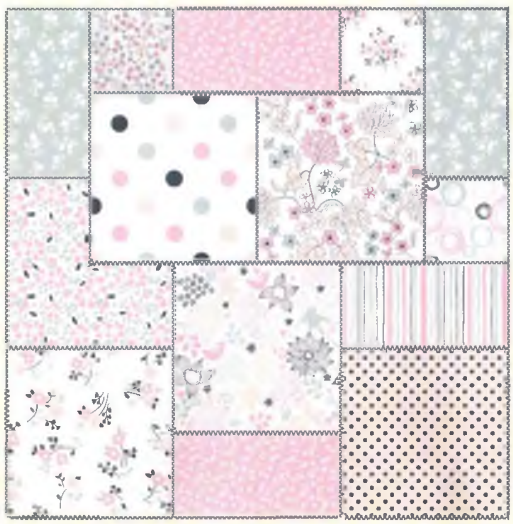


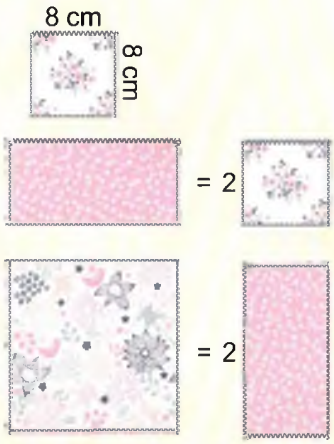
5. Keltirilgan o'lchov birliklarida yozing.

7 ha = ☐ m^2 3 a = ☐ cm^2 80 ha = ☐ a

6 400 dm^2 = ☐ cm^2 440 000 dm^2 = ☐ ha 5 ha = ☐ dm^2

6. Quroq ko'rpa turli kvadrat va to'g'ri to'rtburchak shaklidagi bo'lakchalardan tikilgan. Katta va kichik bo'lakchalarning o'lchamlari va nisbatlarini bilgan holda, bu ko'rpaning yuzini toping.





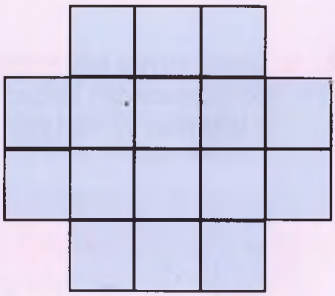
7. Quroq tikish texnikasi nima deb atalishini aniqlang. Amallarni to‘g‘ri tartibda bajaring, harflarni hosil bo‘lgan natijalarga muvofiq joylashtiring.

72 000 : 60 · 3 + 90 000 : (63 000 : 70 + 100) – 2 100

3 600	1 590	90	900	3 690	1 200	1 000
V	K	O	P	R	CH	E

8. Ko‘rpa tikish darsi soat 11:30 da boshlanib, 45 minutdan ikki dars davom etdi. Darslar orasida 10 minutlik tanaffus bo‘ldi. Dars soat nechada tugadi?

9. Polotnodagi naqsh ko‘rinishi va o‘lchamlari bir xil bo‘lgan to‘rtta shakldan iborat. Bu shakllar qanday ko‘rinishda bo‘lganini ko‘rsating. Agar butun naqshning yuzi 784 cm^2 bo‘lsa, shu bo‘laklardan har birining yuzini toping.



10. Eng kichik yuz birligiga keltirib hisoblang.

34 ha 12 a + 41 ha 94 a

87 m^2 5 dm^2 – 29 m^2 75 dm^2

14 dm^2 53 cm^2 · 18

5 cm^2 76 mm^2 : 24

11. Turli mamlakatlarda odamlar eng katta quroq choyshablar tikishga harakat qilishadi. Hozirgi kunda, 2000-yil 18-iyungacha tikib tugallangan quroq choyshab eng katta quroq choyshab hisoblanadi. Uning uzunligi 200 m, kengligi esa uzunligidan 3000 cm qisqa. Ushbu quroq choyshabning yuzi qanday?

Yondosh mavzu:
foydali qazilmalar.

Yuz birliklari,
tenglamalar, masalalar.





1. Transportlar zanjiridagi qonuniyatni toping.



2. Ifodalarning qiymatlarini hisoblang va darsda qaysi foydali qazilmalar haqida so‘z borayotganini aniqlang.

O‘	6782 + 2509	**N**	3987 : 9
E	9278 – 2079	**O**	5125 : 5
T	5938 + 3197	**I**	670 · 12
R	12005 – 4917	**K**	902 · 3
M	32 · 45	**F**	(29 + 31) · 100

9 135	7 199	1 440	8 040	7 088

443	7199	6 000	9 135

2 706	9 291	1 025	8 040	7 088

3. Jadvaldan teng qiymatlarni toping.

780 000 mm^2	7 800 cm^2	370 000 dm^2
420 000 m^2	5 600 mm^2	37 a
370 m^2	780 cm^2	56 dm^2
78 m^2	42 ha	560 000 mm^2

4. Uylarni issiqlik bilan ta'minlaydigan isitish stansiyasida hafta davomida 5 t 4 q 60 kg ko'mir sarflangan. Xuddi shu me'yor bo'yicha bir oyda qancha ko'mir sarflanadi?

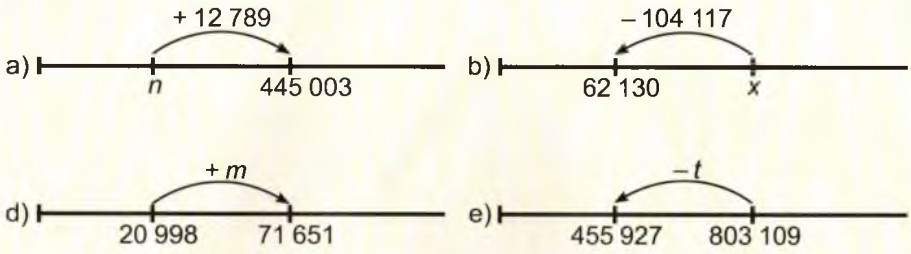
5. Isitish stansiyasining uchta omborida 840 tonna ko'mir bor. Birinchi omborda 319 tonna ko'mir saqlanadi, bu ikkinchi ombordagidan 115 tonna ko'p. Uchinchi omborda qancha ko'mir bor?

6. Tenglamalarni yeching.

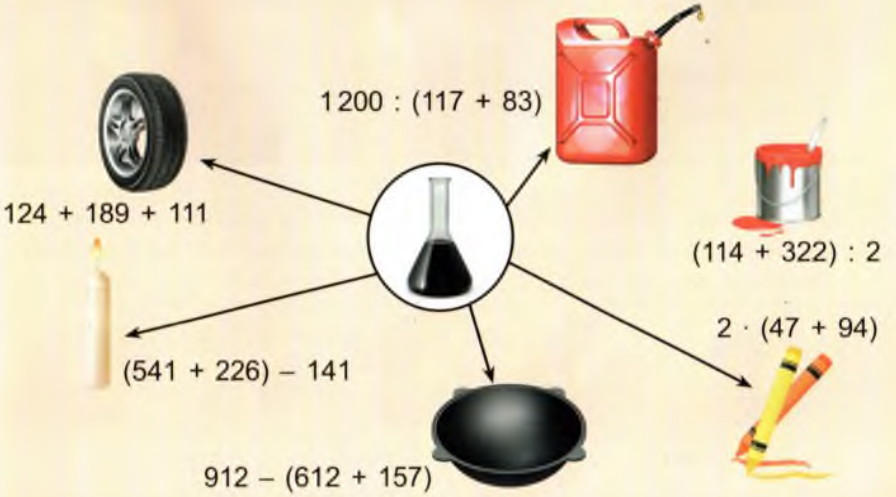
$x + 5 = 2 \cdot 16$ $\qquad$ $t - 300 = 100 : 20$

$(m - 4) : 14 = 5$ $\qquad$ $(500 - c) \cdot 5 = 55$

7. Sxemalar bo'yicha tenglamalar tuzing.



8. Ifodalarning qiymatini qulay usulda hisoblang. Faqat juft qiymatlarni toping va neftdan nima ishlab chiqarilishini aniqlang.



9. Omborda 100 kg dan kam bo'lgan bir uyum ko'mir bor. Agar u qoplarga 5 kg dan joylansa, 3 kg ortib qoladi, agar 6 kg dan joylansa, 4 kg ortib qoladi, agar 7 kg dan joylansa, barcha ko'mir to'liq qoplanadi. Omborda qancha ko'mir bor?

10. Tenglamalarni yeching.

$(x + 1\text{ dm }3\text{ cm}) \cdot 2 = 6\text{ dm }4\text{ cm}$

$(9\text{ cm }2\text{ mm} - y) : 3 = 2\text{ cm }8\text{ mm}$

11. Sxema bo'yicha masala o'ylab toping va uni yeching.



Yondosh mavzu:
qog'oz va yog'och.

Kub santimetr,
kub detsimetr.





1. Bir xil yog'och kubiklardan turli ko'rinishdagi shakllar yelimlandi. Agar bitta kubikning massasi 62 gramm bo'lsa, har bir shaklning massasi qanday bo'ladi? Qaysi shakl eng og'ir?



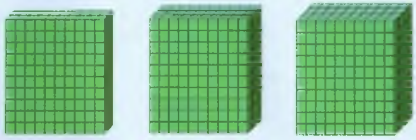
2. Qaysi o'ramdagi qog'oz ko'proq? O'z xulosangizni tushuntiring.





Shaklning hajmi – bu hajmli shaklning ichiga sig'adigan o'lchovlar soni. Ko'pincha tomonlari 1 mm, 1 cm, 1 dm bo'lgan kublar o'lchov birligi sifatida olinadi. Bunday kublarning hajmlari mos ravishda 1 mm^3, 1 cm^3, 1 dm^3 kabi belgilanadi.

3. Bitta kichik kubikning hajmi 1 cm^3. Ushbu kuboidlar (to'g'ri burchakli parallelepipedlar)ning hajmini toping.



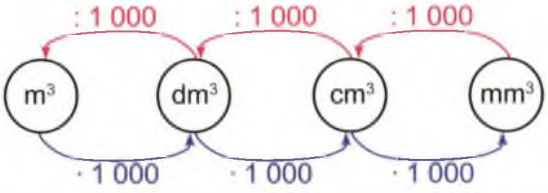
— 1 cm^3

4. Kichik kubikning tomonlari uzunligi 1 cm, hajmi esa 1 cm^3. Tomoni 1 dm bo'lgan kubning hajmini toping.



Barcha hajm birliklari o'zaro bog'liq.





5. Ko'rsatilgan o'lchov birliklarida yozing.

1 dm^3 = ☐ cm^3 | 1 cm^3 = ☐ mm^3 | 1 dm^3 = ☐ mm^3
4 dm^3 = ☐ cm^3 | 8 cm^3 = ☐ mm^3 | 5 dm^3 = ☐ mm^3

6. Qulay o'lchov birligiga keltirib hisoblab.

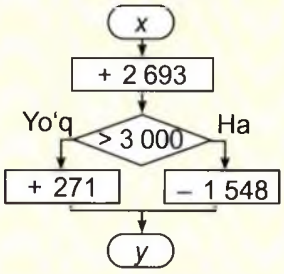
1 cm^3 124 mm^3 + 8 cm^3 3 mm^3 – 5 cm^3 420 mm^3
16 dm^3 308 cm^3 : 6 + 1 235 cm^3
(2 m^3 – 1 m^3 7 dm^3) : 3

7. Taxtalar to'rtburchak shaklidagi bloklarga taxlangan. Har bir blokning pastki qatorida 6 tadan taxta bor, bloklarda 9 tadan shunday qatorlar mavjud. Bitta blokda nechta taxta bor? 7 ta shunday blokda nechta taxta bor?

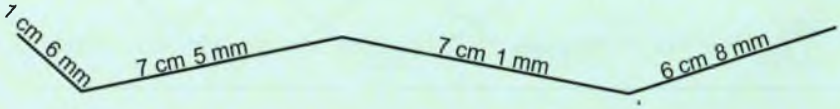


8. Amallarni algoritm bo'yicha bajaring. Javoblarni o'sish tartibida joylashtiring. "Qog'oz" so'zi bizga italyan tilidan kirib kelgan. Uning tarjimasini taxmin qila olasizmi?

x	378	317	174	110	329	121
y						
	O	X	K	P	L	O



9. Chizmada solning daryo bo'ylab bosib o'tgan yo'li tasvirlangan. Chizmadagi chiziq uzunligi qanday?



Chizmadagi bir santimetr 2 km yo'lga to'g'ri keladi. Sol qanday masofani bosib o'tgan?

10. Stol ustida beshta bir xil o'ram qog'oz bor. Barcha o'ramlardagi varaqlar miqdori teng. Har bir o'ramdan 60 tadan varaq olingandan so'ng, oldin ikkita o'ramda qancha qog'oz bo'lgan bo'lsa, shuncha qog'oz qoldi. Dastlab har bir o'ramda necha varaqdan qog'oz bo'lgan?

11. Eng kichik hajm birligiga keltirib hisoblang.

$4\ dm^3\ 124\ cm^3 - 2\ dm^3\ 735\ cm^3$ $\qquad$ $2\ dm^3\ 5\ cm^3 : 5$

$7\ cm^3\ 105\ mm^3 + 5\ cm^3\ 72\ mm^3$ $\qquad$ $6\ cm^3\ 176\ mm^3 \cdot 20$

12. Yupqa qog'oz o'ramida 200 varaq, qalin qog'oz o'ramida esa undan 300 varaq ko'p qog'oz bor. Xonada 7 ta yupqa va 4 ta qalin qog'oz o'rami bo'lsa, jami necha varaq qog'oz bor?

Yondosh mavzu:
muz va suv.

Hajm birliklari,
kub detsimetr, litr.





1. Qaysi idishga ko‘proq suv sig‘adi? O‘z xulosangizni tushuntiring.



2. Akmal kartondan kub shaklidagi quti yasadi. Ushbu qutining har bir tomoni 10 cm yoki 1 dm.
Qutining hajmini toping:
a) kub detsimetrlarda;
b) kub santimetrlarda.



Akmal bu qutini tepasiga qadar suv bilan to‘ldirdi, keyin esa bu suvni avaylab bir litrli bankaga quydi. U suv bankaning bo‘g‘izigacha to‘lib, hammasi bankaga sig‘ganiga ajablandi. Akmal qanday xulosaga kelishi mumkin?





Yodda tuting!

1 litr teng 1 dm^3 ga
1 l = 1 dm^3

1 dm^3 = 1 000 cm^3
1 litr teng 1 000 millilitr (ml)ga
Xulosa:
1 ml = 1 cm^3

3. Ko‘rsatilgan o‘lchov birliklariga keltiring.

$8\ dm^3 = \square\ cm^3$ $\quad 9\ l = \square\ dm^3$ $\quad 6\,000\ dm^3 = \square\ l$

$23\ dm^3 = \square\ l$ $\quad 8\,000\ cm^3 = \square\ dm^3$ $\quad 2\ dm^3 = \square\ cm^3$

4. Hisoblang. Har bir stakanda qancha suv bor?



$96\ ml + 8\ cm^3$



$124\ ml + 2 \cdot 8\ cm^3$



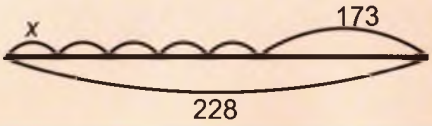
$178\ ml + 3 \cdot 8\ cm^3$

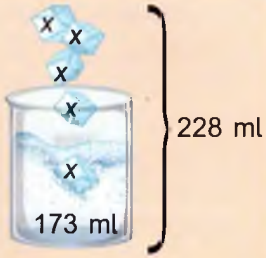
5. Stakanga tomoni 3 cm bo‘lgan 14 ta bir xil muz kubiklari solindi. Biroz vaqt o‘tgach, muz erib, suvga aylandi. Necha millilitr suv hosil bo‘ldi?



6. Rasm bo‘yicha tenglama tuzing va uni qulay o‘lchov birliklariga keltirib yeching.

Sxema bu tenglama bilan qanday bog‘liq?





7. Ifodalarni soddalashtiring.

$421 + a + 328$ $\quad 112 + b + 408$

$t + 45 + 59 + 55$ $\quad 19 + 31 + n + 64$

$x + 795 : 5 + 91 : 7$ $\quad 1\,155 : 7 + z + 13 \cdot 8$

8. Hisoblashlarni bajarmasdan taqqoslang.

240 : 6 ☐ 264 : 6	228 : 12 ☐ 228 : 19
554 + 183 ☐ 554 – 183	129 + 325 ☐ 325 + 192
440 : 4 ☐ 440 · 4	655 + 117 ☐ 655 – 117

9. Ifodalarni yozing va ularni hisoblang. Topilgan qiymatlarni jadvalga yozing va qonuniyatni aniqlang. Jadvaldagi oxirgi qiymatni toping.

a) 8356 va 6119 sonlari yig'indisidan 14241 sonini ayirish.

b) 23 va 45 sonlari ko'paytmasini 3 ga bo'lish.

d) 1024 va 4 sonlari bo'linmasiga 200 ni qo'shish.

123	a	b	d	678	?

10. Bolalar to'plamdagi kubiklarni o'zaro bo'lib olishdi. Madina 14 ta kubik, Jasur 18 ta, Aziza 27 ta, Akmal 13 ta, Umida 20 ta, Sardor esa 10 ta kubik oldi.

a) Bolalarning qaysi biri o'zining barcha kubiklaridan kub yasay oladi?

b) Qolgan ikkita bola o'zlarining kubiklarini birlashtirib, kub yasay oladilarmi?

11. Qulay o'lchov birligiga keltirib hisoblang.

56 l + 167 l : 8 — 225 l · 2 : 10 + 471 l

19 dm^3 + 63 l — (228 l – 192 dm^3) : 12

12. Buvim qish uchun 37 ta uch litrli va 48 ta ikki litrli bankalarda kompot yopdi.

a) Jami necha litr kompot yopilgan?

b) Aziza buvisi 200 dm^3 dan ortiq kompot tayyorlaganini aytdi. Aziza haqmi?

Yondosh mavzu:
mahsulotlar uchun idish.

Kattaliklar:
uzunlik, massa, hajm,
ularning o'lchov birliklari.





1. Har bir idishga necha millilitr suyuqlik sig'ishini aniqlang.



Qirrali stakan
(119 + 841) : 4



Choy qoshiq
(245 + 755) : 200



Osh qoshiq
75 · 27 – 2 010

2. Ifodalarning qiymatlarini hisoblang va suyuq mahsulotlar uchun karton, metall va polietilen plonkadan tayyorlangan ko'p qavatli qadoq nomini aniqlang.

A 69 : 23 · 15 + 600 : 100
E 78 : 39 · 25 – 400 : 10
K 180 : (60 : 20) + 1 200 : 6
P 427 + 700 : 5 · 4
R 928 – 912 : 4 · 2
T 840 : (7 · 3) · 10

400	10	400	472	51	987	51	260

3. Qulay o'lchov birligiga keltirib hisoblang.

81 km 231 m + 22 457 m – 726 000 dm
25 dm^3 : 20 + 175 cm^3 · 14 – 165 cm^3
(32 dm^2 75 cm^2 – 11 dm^2 50 cm^2) : 25

4. Onam 3 litr sut sotib oldi. U pirog uchun 380 ml, bo'tqa uchun esa 140 ml ko'proq sut ishlatdi. Keyin Akmal, Aziza va Sardor o'zlariga 170 ml dan sut quyib olishdi. Qancha sut qoldi?

5. Murakkab masalalarni amallar bo'yicha yeching.

a) Akmal tug'ilgan kuniga sinfdoshlarini taklif qildi. Ulardan 19 nafari o'g'il, 12 nafari esa qiz bola. Tug'ilgan kunga qancha bola qatnashgan?

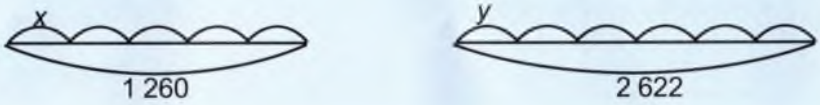
b) Har bir bolaga 250 ml sig'imli bitta kichik qutidan sharbat berish rejalashtirilgan edi. Jami necha litr sharbat kerak bo'ladi?

d) Do'konda kichik qutili sharbat bo'lmaganligi sababli, ularni katta qutilarga almashtirishga to'g'ri keldi. Har bir katta qutiga 4 ta kichik qutidagi sharbat sig'adi. Nechta katta qutili sharbat sotib olish kerak?

6. Kerakli tomonlarni o'lchab, bu shakllarning perimetrlarini toping. Javobingizni santimetr va millimetrlarda ifodalang.



7. Sxemalar bo'yicha tenglamalar tuzing va ularni tekshirishlar bilan yeching.



8. Har bir ifoda uchun uchtadan tenglik o'ylab toping.
a) a soni b sonidan 23 900 taga ko'p.
b) c soni d sonidan 18 marta ko'p.

9. Masalaga ifoda tuzing va uning qiymatini $a = 90$, $b = 45$; $a = 90$, $b = 30$; $a = 90$, $b = 90$ bo'lganda toping.

Do'konga har biri 45 kilogrammdan bo'lgan a qop shakar keltirildi. Barcha shakar har biri b grammdan qilib, xaltachalarga solindi. Buning uchun qancha xaltacha kerak bo'ldi?

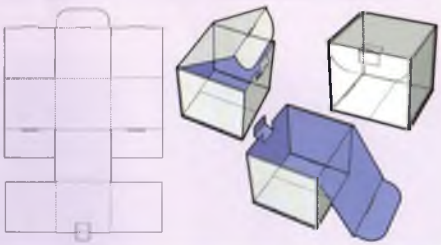
10. 8 litrlik bochkadagi asaldan 4 litr asal quyib olinishi kerak. Buning uchun 3 litrli va 5 litrli ikkita bo'sh bankadan foydalanish mumkin. Buni qanday amalga oshirsa bo'ladi?



11. Qulay o'lchov birligiga keltirib hisoblang.

124 km 51 m $-$ 64 300 m + 400 000 dm
64 dm^3 : 40 + 218 cm^3 · 21
(54 dm^2 42 cm^2 : 6 + 12 dm^2 3 cm^2) : 10

12. Sharbat uchun qadoq bo'yi 70 cm, eni esa bo'yidan 227 mm qisqa bo'lgan maxsus kartondan kesiladi. Kartonning yuzi qanday?



Biz nimani o‘rgandik? Nimalarni bilib oldik?

Biz massa birliklari bilan tanishdik.

1. Ushbu yashiklarning massalarini aniqlang. Yashiklarni ular massalarining o‘sishi tartibida joylashtiring.



3 t : 60 : 2



17 kg + 9 kg



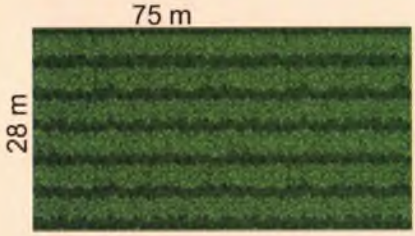
(12 q – 8 q) : 10

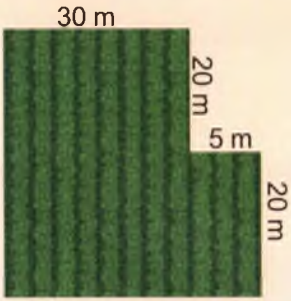


400 g · 50

Biz yuz birliklari bilan tanishdik.

2. Ushbu ikkita uchastka maydonini kvadrat metrlarda toping. Bu yuzlarni arlarda ifodalang.





Biz hajm birliklari bilan tanishdik.

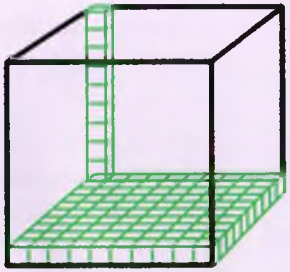
3. a) Kichik kubikning hajmi 1 cm^3 ga teng. Katta kubning hajmini toping. Uni kub detsimetrlarda ifodalang.

b) Bo‘sh joylarni to‘ldirib, daftaringizga ko‘chirib yozing.

7 m^3 = ... dm^3

12 dm^3 = ... cm^3

5 cm^3 = ... mm^3

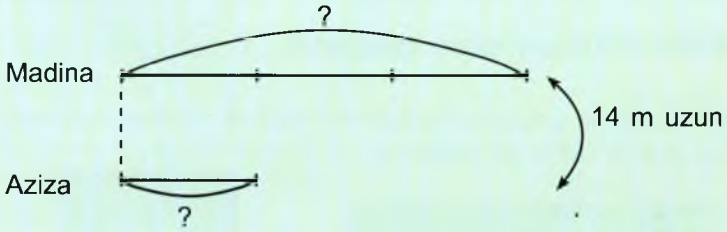


Biz ifodalar tuzib, ularning qiymatlarini hisoblay olamiz.

4. Ifodalar tuzing va ularning qiymatini toping.
a) 23 809 va 45 008 sonlari yig'indisini 2 marta orttirish.
b) 139 302 va 9 sonlari bo'linmasini 28 294 soniga qo'shish.
d) 52 304 va 12608 sonlari ayirmasini 4 marta kamaytirish.

Biz masalalarni sxema bo'yicha yecha olamiz.

5. Sxema bo'yicha masala o'ylab toping va uni yeching.



Biz uzunlik, yuz va hajm birliklari bilan ishlay olamiz.

6. Ifodalang:
a) metr va santimetrlarda:
87 dm – 4 m 6 dm, 7 m 10 cm + 83 dm;
b) detsimetr va santimetrlarda:
15 dm 6 cm – 92 cm; 7800 mm + 4 m 23 cm;
d) kvadrat santimetrlarda:
45 dm^2 12 cm^2 + 11 dm^2 51 cm^2; 91 dm^2 – 62 dm^2 45 cm^2;
e) arlarda:
5 ha 72 a · 3; 70 ha 3 a – 15 ha 58 a;
f) kub detsimetrlarda:
15 m^3 · 4 – 22 dm^3 · 2: 762 l + 24 l · 6.

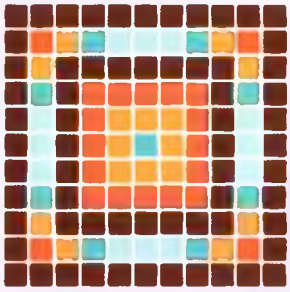
Yondosh mavzu:
mozaika.

Paletka, yuz,
birlik o'lchov.

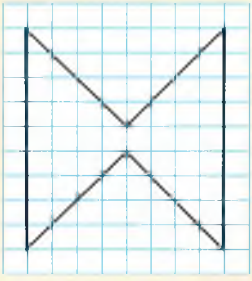




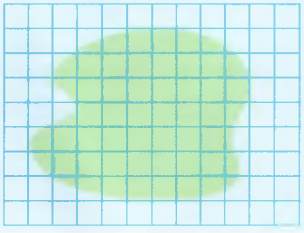
1. Siz ko'rib turgan narsa mozaika – plitka bo'laklaridan yaratilgan tasvir yoki naqsh. Har bir rangdagi plitkadan qanchadan ishlatilganligini hisoblang. Naqshda jami nechta plitka bor? Agar bitta plitkaning yuzi 10 cm^2 bo'lsa, unda butun naqshning yuzi nimaga teng?



2. Daftaringizga shaklni qayta chizing.
a) butun kataklarni yashil rangga bo'yang. Rasmda nechta butun katak bor?
b) yarim kataklarni qizil rangga bo'yang. Bu yarim kataklardan nechta butun katak hosil qilish mumkin?
d) Butun kataklarni yarim kataklardan hosil qilingan butun kataklarga qo'shing. Shaklning kataklardagi yuzini toping.

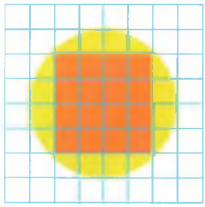


3. Ushbu shaklning yuzini qanday topish mumkinligi haqida o'ylab ko'ring. O'z usulingizni 2-topshiriqni yechish usuli bilan solishtiring. Ikkala usulda qanday umumiylik bor? Ularning farqi nimada?



Paletka – har qanday shaklning yuzini o'lchash uchun asbob. Bu birlik o'lchov sifatida olingan kvadratchali to'rlarga bo'lingan shaffof plastinka.

Yuzni paletka yordamida taxminiy hisoblash algoritmi



1. Shaklni paletka bilan shunday yopingki, bunda shakl to'laligicha paletka ichida yotsin.

2. Paletkadagi shakl ichida to'laligicha joylashgan kvadratlar sonini sanang. Ushbu rasmda bu 16 ta zarg'aldoq rangdagi kvadratni tashkil etadi.

3. Shaklni qisman qoplaydigan kvadratlar sonini sanang. Ushbu rasmda bu 20 ta sariq rangdagi kvadratni tashkil etadi.



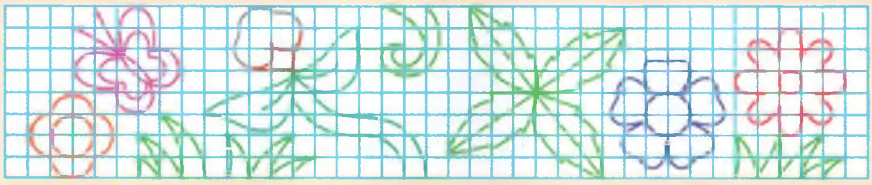
4. To'liq kvadratlar soniga to'liq bo'lmagan kvadratlar sonining yarmini qo'shing: 16 + 20 : 2 = 16 + 10 = 26. Javob: Doiraning yuzi taxminan 26 katakka teng.



4. Paletka o'rnida siz daftaringizdagi kataklardan foydalanishingiz mumkin. Daftaringizga biror dog' rasmini chizing va uni bo'yang. Partadoshingiz bilan daftarlaringizni almashtiring va unga ushbu dog'ning yuzini hisoblashni taklif qiling.
U hisoblashlarni qanday bajarganligini tekshiring.

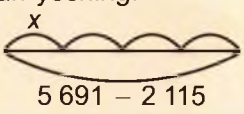


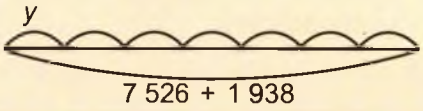
5. Rasmdagi barglar va gullar yuzini hisoblab toping.



6. Rassom devorga feruza, ko'k va oq rangdagi plitkalar yordamida mozaika termoqda. Mozaika uchun unga 354 ta feruza rangli plitka kerak bo'ladi, bu ko'k rangli plitkadan 127 ta ko'p va oq rangli plitkadan esa 207 ta kam. Mozaika uchun unga qancha plitka kerak bo'ladi?

7. Sxemalar bo'yicha masalalar tuzing va ularni tekshirishlar bilan yeching.





8. 129 ta toshdan iborat zanjir quyidagi qoida bo'yicha terilgan: oq tosh, kulrang tosh, qora tosh. Oxiridan boshlab sanaganda, 18-tosh qanday rangda bo'ladi?

9. Ifodalarni hisoblang va mos harflar yordamida so'z hosil qiling. Mozaikani hosil qilgan rangli shaffof shisha bo'laklari qanday ataladi?

A 261 783 + 193 740
S 543 100 – 291 928
L 308 · 71
T 5040 · 6
M 471 000 : 6
K 98 956 : 11

251 172	78 500	455 523	21 868	8 996	30 240	455 523

10. Tikish turlaridan biri olmosli kashta yoki olmosli mozaikadir. Matoga kichkina yaltiroq toshlar naqshga muvofiq qat'iy ravishda yopishtirilishi kerak. Umida dekabr va yanvar oylarida har kuni o'zining olmosli rasmi ustida ishladi. Dekabrda u rasmga kuniga 40 minut, yanvarda esa 50 minut vaqt sarfladi. Bu ishni bajarish uchun Umida necha soat vaqt sarflagan?

Yondosh mavzu:
rangtasvir.

Yuz, aylana, doira.

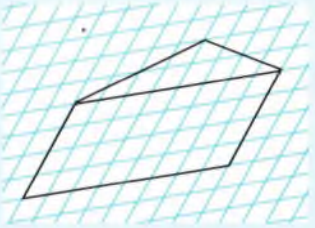




1. Paletkadagi kvadratning o'lchami 1 cm^2 ga teng. Rasmning yuzini aniqlang.



2. Rassomlar devor yoki matoga rasm chizishdan oldin, ular uning xomaki nusxasini qog'ozga chizlb oladilar. Rassom o'z xomaki nusxasini qiyshiq to'rli qog'ozga chizgan. Ushbu rasmni daftaringizga kataklar bo'yicha ko'chirib chizing. Hosil bo'lgan chizmaning yuzini topa olasizmi?



3. *ABCD* to'g'ri to'rtburchakning tomonlarini o'lchang. Daftaringizga xuddi shunday to'g'ri to'rtburchak chizing. Uning yuzini hisoblang.



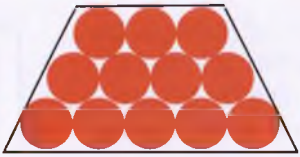
Ushbu to'g'ri to'rtburchakda shunday kesma o'tkazingki, chizmada yuzi 4 cm^2, 24 cm^2 va 20 cm^2 ga teng bo'lgan uchta to'g'ri to'rtburchak hosil bo'lsin.

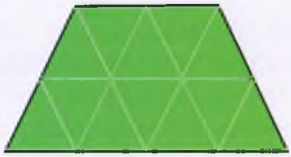
4. To'g'ri to'rtburchakning yuzi 820 cm^2, bo'yi esa 41 cm ga teng. Uning eni va perimetrini toping.

5. Taqqoslang.

750 ☐ 75	7 m 26 cm ☐ 72 dm 5 cm	10 kg ☐ 1 q
809 ☐ 890	3 dm 4 cm 5 mm ☐ 354 cm	4 q 5 kg ☐ 45 kg
502 ☐ 522	3 m^2 5 dm^2 ☐ 35 dm^2	700 dm^3 ☐ 70 l

6. Tomning yuzini o'lchash uchun Madina o'lchov sifatida doiralarni, Aziza esa uchburchaklarni tanladi. Qizlarning qaysi biri o'z o'lchovlarida yuzni aniqroq o'lchagan? Ularning tomi necha birlik yuzni tashkil qiladi?

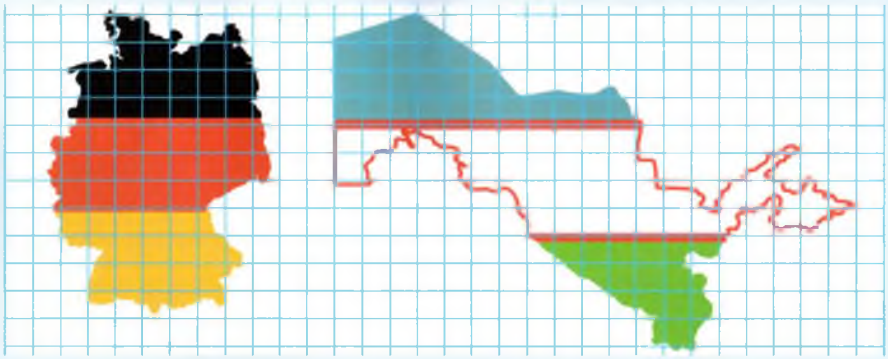




7. Jadval bo'yicha uchta tenglama tuzing. Ulardan birini yeching.

	 Naturmort	 Peyzaj	 Portret
Bor edi	$x - 118$	719	162
Sotildi	215	$y + 112$	$501 - z$
Qoldi	256	234	123

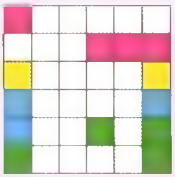
8. Rassom ikkita davlat xaritasini bir xil masshtabda chizdi. Paletkadan foydalanib, qaysi davlat maydonining yuzi katta ekanini aniqlang. Rasmda qaysi davlatlar tasvirlangan?



9. Rassom "Qora kvadrat" rasmini chizdi. Keyin u bu kvadratda shunday chiziqlar o'tkazdiki, bunda har bir chiziq bu kvadratni ikkita teng qismga bo'ladi. U nechta shunday chiziq chizishi mumkin? Bunday holatlarning barchasini daftaringizga chizing.



10. Ustaning yashil, sariq, qizil va ko'k rangli plitkalari bor. U turli rangdagi 4 ta teng shaklga ega mozaikani hosil qilishni xohlaydi. Siz ustaning ishini tugallay olasizmi?



11. Qulay usulda hisoblang.

$76\ dm^2\ 14\ cm^2 + 2\ dm^2\ 29\ cm^2 + 3\ dm^2\ 86\ cm^2$

$57\ cm^2\ 32\ mm^2 + 53\ cm^2\ 96\ mm^2 + 47\ cm^2\ 4\ mm^2$

12. Daftaringizga bulut rasmini chizing. Uning yuzini hisoblash uchun paletka sifatida katak qog'ozdan foydalaning. Bulutning yuzi kataklarda nimaga teng?

Yondosh mavzu:
sirk.

Parallelepiped,
kub, kuboid.





1. Faqat hajmli shakllar nomini ayting.



2. To‘g‘ri burchakli parallelepiped va kubning qanday umumiy jihati bor?
Ular bir-biridan nimasi bilan farq qiladi?
Agar kubning bir tomonini siyohga botirib, qog‘ozga o‘sha tomonining izi tushirilsa, qanday shakl hosil bo‘ladi?
Agar to‘g‘ri burchakli parallelepiped tomonlarining izlari tushirilsa-chi?

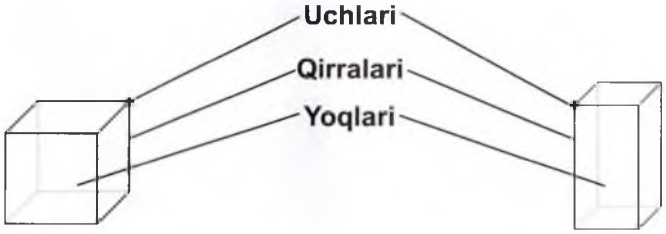


To‘g‘ri burchakli parallelepiped



Kub







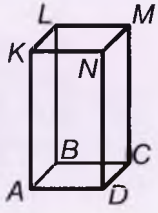
3. Tadqiqot loyihasi: kuboid va kubning xususiyatlarini o‘rganish.
a) Ularning yoqlari, qirralari va uchlarini sanang. Jadvalni daftaringizda to‘ldiring.

	To‘g‘ri burchakli parrallelepiped	Kub
Yoqlari		
Qirralari		
Uchlari		

b) To‘g‘ri burchakli parrallelepipedning qarama-qarshi yoqlarini solishtiring. Bu yoqlar haqida nima deyish mumkin?
d) Kubning barcha yoqlarini solishtiring. Ular haqida nima deyish mumkin?
e) Kuboid qirralarining uzunliklarini solishtiring. Uning nechta bir xil qirralari bor? Nechta turli qirralar mavjud?
f) Kubning nechta bir xil qirrasi bor?
g) Xulosa chiqaring: kubni to‘g‘ri burchakli parallelepipedning turlaridan biri deyish mumkinmi?



4. Bu shakl qanday ataladi? Daftaringizga yozing:
a) bu shaklning barcha uchlarini;
b) bir-biriga teng bo‘lgan barcha qirralarini;
d) bir-biriga teng bo‘lgan barcha yoqlarini.



5. Sirk o'yinlari uchun kub shaklidagi simli karkas yasaldi. Bu kub qirralarining uzunligi 130 cm bo'lsa, uni yasashga qancha sim ketgan?

6. Misollarni yeching. Ingichka yog'och yoki sim ustida yura oladigan sirk artisti qanday ataladi?

B	$45 \cdot 5 + 6\,599$	**N**	$2\,478 - 3\,000 : 5 \cdot 4$
V	$6\,000 - 340 : 17$	**R**	$6200 + 812 : 4 \cdot 3$
I	$72\,000 : (63\,000 : 70)$	**S**	$8\,400 : (7 \cdot 4) \cdot 2$
K	$10\,087 - 50\,000 : 25$	**T**	$2\,500 : (5 \cdot 4 \cdot 5)$
L	$(180 + 330) - 14 \cdot 20$	**E**	$240 + (18 \cdot 3) \cdot 5$

510	8 087	5 980	80	230	80	6 824	6 809	80	600	25

7. Sirkdagi tomoshabinlar uchun qo'yilgan o'rindiqlar sektorlarga bo'lingan. Arena atrofida jami 8 ta sektor bor. Uchta sektorda 75 tadan, yana ikkitasida esa 63 tadan tomoshabin o'tiribdi. Agar tomoshaga jami 573 ta chipta sotilgan bo'lsa, qolgan uchta sektorda nechta tomoshabin o'tiribdi?

8. Masxarabozlar uch xil rangli – yashil, qizil va ko'k tasmalarni bitta qilib bog'lashdi. Uning uzunligi 21 m chiqdi. Keyin bir masxaraboz bu tasmadan yashil tasmaning o'rtasidan ko'k tasmaning o'rtasigacha bo'lgan qismini kesib oldi. Uning uzunligi 12 m chiqdi. Qizil tasmaning uzunligi qancha bo'lgan?

9. Amallar tartibiga rioya qilgan holda hisoblang.
$81\,000 : 27 + 37 \cdot (456 - 398) - 216 : 6$

10. Qirrasining uzunligi 8 cm bo'lgan 25 ta bir xil kubdan minora yasaldi. Bu minora qanday balandlikka ega bo'ladi?

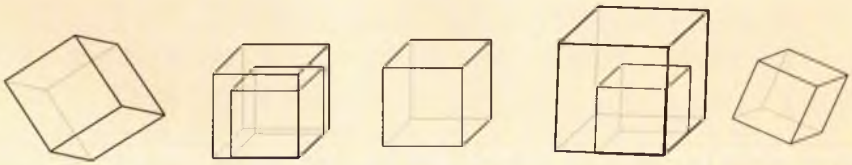
Yondosh mavzu:
ko'rgazma.

Kub, qirra, yoq, uch.





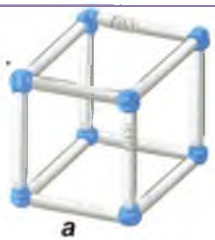
1. Ko'rgazmada bir rassomning ishlari namoyish qilindi. Rasmlarga qarab, qaysi kubga ko'proq sim ketganini aniqlay olasizmi?





Kub 12 ta bir xil qirradan iborat. Kubning barcha qirralari uzunliklari yig'indisi:

$$L = a \cdot 12$$

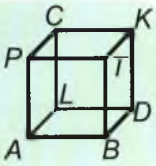


a

2. Masalalarga doir ifodalar tuzing va ularni hisoblang.
a) Simdan tomoni 15 cm bo'lgan kub yasash kerak. Buning uchun qancha sim kerak bo'ladi?
b) Kub yasash uchun 540 dm sim ketdi. Bu kub qirrasining uzunligini toping.
d) Uzunligi 180 cm bo'lgan simdan tomoni uzunligi 12 cm bo'lgan kub yasaldi. Qancha sim ortib qoldi?

3. Kub qirrasining uzunligi 16 cm. Uning qirralari uzunliklari yig'indisi nimaga teng? Bu kubning har bir qirrasini 3 cm ga uzaytirsak, uning qirralari uzunliklari yig'indisi qanday o'zgaradi?

4. Kubning barcha qirralari nomini yozing. Kubning barcha qirralari uzunliklari yig'indisi 144 cm bo'lsa, daftaringizda uning *AB* qirrasini yasang.



5. Tenglamalarni tekshirishlar bilan yeching.

$12 \cdot x = 34 \cdot 42$ $\qquad$ $t \cdot 12 = 72\,000 : 60$

6. Ko'rgazmada 63 ta mashhur rassomning asarlari namoyish etildi. Rassomlarning uchdan bir qismi 5 tadan, qolganlari esa ikkitadan asarini olib keldi. Ko'rgazmaga jami nechta asar qo'yilgan?

7. Taqqoslang.

14 cm 3 mm ☐ 143 cm
5 dm^2 4 cm^2 ☐ 54 cm^2
3 m^3 17 dm^3 ☐ 3170 dm^3

52 kg ☐ 52 010 g
3 q 15 kg ☐ 450 kg
27 l ☐ 2070 dm^3

8. Hisoblang. Harflarni amallar tartibi bo'yicha qo'yib chiqsangiz, darsning kirish qismidagi suratda ko'rsatilgan haykalning nomini bilib olasiz. Ifodalarning qiymati esa bu haykal o'rnatilgan yilni bildiradi.

M O L A A

$5\,593 + 638 - 4 \cdot (378 - 296) \cdot 13$

9. Amallar tartibiga rioya qilgan holda hisoblang.

$1321 + (1600 - 500 \cdot 255 : 100) \cdot 809$

10. Uyingizda bir xil uzunlikdagi tayoqchalardan kub yasang. Tayoqchalarni plastilin yoki boshqa narsa bilan bir-biriga mahkamlang.

Yondosh mavzu:
haykaltaroshlik.

To‘g‘ri burchakli parallelepiped, qirra, yoq, uch.





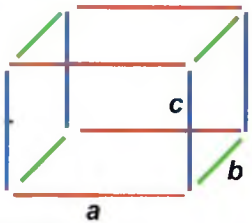
1. Turli uzunlikdagi naychalardan to‘g‘ri burchakli parallelepiped yasaldi. Bunga nechta naycha kerak bo‘ldi? Uzunligi bir xil bo‘lgan nechta naycha kerak bo‘ldi?





To‘g‘ri burchakli parallelepiped 12 ta qirradan iborat.
To‘g‘ri burchakli parallelepiped barcha qirralari uzunliklari yig‘indisi:

$$L = a \cdot 4 + b \cdot 4 + c \cdot 4$$

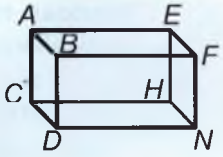


Bu yerda *a* qirraning uzunligi to‘g‘ri burchakli parallelepipedning bo‘yi, *b* qirraning uzunligi uning eni, *s* qirraning uzunligi esa balandligi bo‘ladi.

2. Masalalarga doir ifodalar tuzing va ularni hisoblang.
a) Simdan to‘g‘ri burchakli parallelepiped yasash kerak. Uning bo‘yi 5 cm, eni 4 cm, balandligi esa 3 cm. Buning uchun qancha sim kerak bo‘ladi?
b) Parallelepiped yasash uchun uzunligi 12 cm bo‘lgan 4 ta naycha, uzunligi undan 20 mm qisqa bo‘lgan 8 ta naycha kerak bo‘ladi. Bu parallelepiped qirralari uzunliklari yig‘indisi nimaga teng bo‘ladi?

3. To‘g‘ri burchakli parallelepipedning balandligi 5 cm. Uning eni balandligidan 2 marta, bo‘yi esa 4 marta katta. Bu parallelepiped barcha qirralari uzunliklari yig‘indisini toping.

4. To‘g‘ri burchakli parallelepipedning barcha qirralari nomini yozing. Agar parallelepipedning bo‘yi 8 cm, eni 5 cm, balandligi esa 6 cm bo‘lsa, daftaringizda *CD*, *NF* va *DN* kesmalarni yasang.



5. Tenglamalarni tekshirishlar bilan yeching.

$x + 45\,000 + 21\,378 = 98\,206$ $y - 38 \cdot 702 = 56\,000$

6. Bog‘ atrofidagi devor 45 bo‘lakdan iborat bo‘lishi kerak. 11 ta bo‘lakni yasash uchun 539 kg cho‘yan sarflandi. Qolgan bo‘laklarni yasash uchun necha kilogramm cho‘yan kerak bo‘ladi?

7. Quyidagi sonlardan 4 ta turli tenglik tuzing:
6 400, 800, 8;
26 703, 54 291, 27 588.

8. Bog‘dagi ko‘prikcha bir-biriga taqab mixlangan g‘o‘lalardan yasalgan. Aziza o‘sha g‘o‘lalardan birining ustiga chiqdi. Bu g‘o‘la chapdan sanaganda 29-g‘o‘la, o‘ngdan sanaganda esa 45-g‘o‘la ekan. Ko‘prikcha nechta g‘o‘ladan yasalgan?

9. Amallar tartibiga rioya qilgan holda hisoblang. Bog‘larda zinapoyalar shaklida yasalgan sharshara qanday ataladi?

$10\,800 \cdot (4\,200 : 700) : 100 + 328 \cdot (432 - 371)$

A 61	**D** 20 656	**K** 6	**S** 64 800
A 20 008	**E** 28 800	**K** 648	**T** 13 128

10. To‘g‘ri burchakli parallelepipedning bo‘yi 12 cm, eni 10 cm, balandligi esa 2 cm. Uning qirralari uzunliklari yig‘indisi nimaga teng?

Yondosh mavzu:
haykaltaroshlik.

Kub, qirra, yoq,
uch, yoyilma.





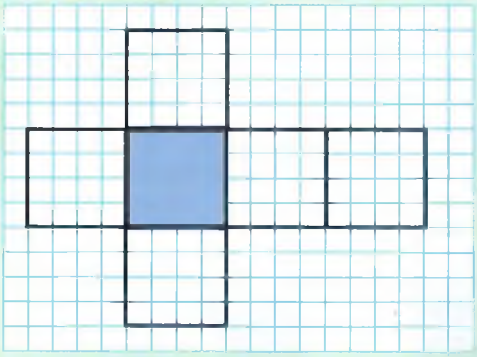
1. Shakllarni ikki guruhga ajrating. Ularni qanday alomatlariga ko'ra guruhlarga ajratish mumkin?



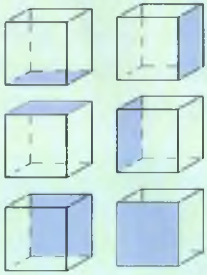
2. Usta yog'ochdan kub shaklidagi quti yasayapti. Buning uchun u nechta kvadrat yasashi kerak? Xulosa qiling: kubning nechta qirrasi bor?



3. Bu shaklni katak daftarning bo'sh varag'iga ko'chirib chizing. Shaklni qirqib olib, kerakli tomonini bo'yang. Bu shakldan kub yasay olasizmi?



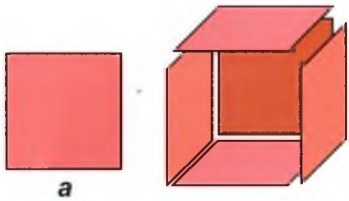
Yasalgan kubni oldingizga qo'ying. Uning bo'yalgan tomonini ko'rsating.





Kubning 6 ta qirrasi bor. Uning har bir yog'i kvadratdan iborat. Kub to'la sirtining yuzi uning barcha yoqlari yuzlari yig'indisiga teng.

$S = a \cdot a \cdot 6$



4. Kub qirrasining uzunligi 7 cm. Toping:



a) bir tomoni yuzini;



b) kub to'la sirtining yuzini.

5. Bog' uchta yonma-yon turgan silindr shaklidagi haykal bilan bezatilgan. Eng past silindrning massasi 59 kg, o'rtancha silindrning massasi esa bundan 35 kg ko'p, lekin eng baland silindrdan 10 kg kam. Barcha haykallarning umumiy massasini toping.



6. Sonlarni o'qing. Sonlarning xonalarini ayting. Qaysi son eng katta? Qaysi son eng kichik?



7. Tengsizliklar to'g'ri bo'lishi uchun yulduzchalar o'rnida qanday raqamlar turishi kerak?

2 589 < 2 5*9	7 89* < 7 891	63 **5 > 63 885
9 998 > 9 99*	10 000 > *999	57 823 < 5* 82*

8. Ifodalar tuzing va ularning qiymatlarini hisoblang.

a) 235 minglik 620 birlikdan iborat songa 15 minglik 3 birlikdan iborat sonni qo'shing.

b) 2 o'nlik 5 birlikdan iborat sonni 7 o'nlikdan iborat songa ko'paytiring.

9. Aziza bog'da ajoyib haykalni ko'rib qolib, undagi yozuvlarni esladi. Azizaga bu yerda qaysi sonlar yashiringanini topishga yordam bering. Ularni xona qo'shiluvchilari yig'indisi ko'rinishida yozing.

| = 1

∩ = 10

ᘐ = 100

= 1 000



10. Rasmda bitta kubning har xil tomondan ko'rinishi tasvirlangan. Uning qarama-qarshi yoqlari rangini yozing.



11. Sonlarni xona qo'shiluvchilari yig'indisi ko'rinishida yozing.

23 456 672, 20 300 567, 558 005, 120 300, 407 000.

12. Kub shaklidagi yashik 6 ta bir xil kvadrat bo'lakdan yasaldi. Har bir bo'lakning tomoni 6 dm 3 mm bo'lsa, yashik to'la sirtining yuzini toping.

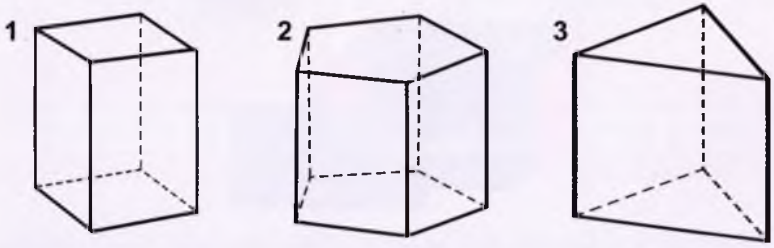
Yondosh mavzu:
qadoq.

To‘g‘ri burchakli parallelepiped, qirra, uch, yoyilma.



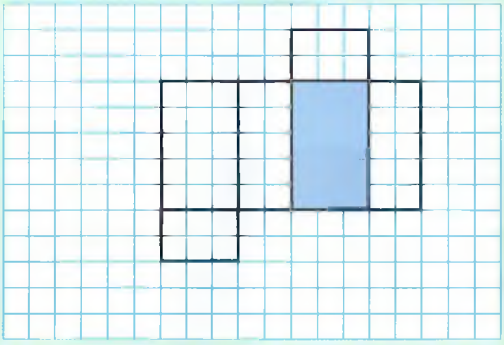


1. Simdan ushbu hajmli shakllar yasaldi. Har bir shaklda nechta uch, qirra va yoq bor?

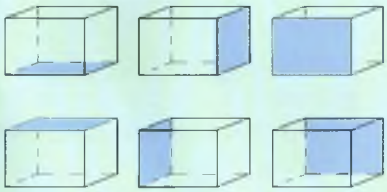


2. To‘g‘ri burchakli parallelepipedning bo‘yi 7 dm, eni 4 dm, balandligi esa 5 dm. Bu to‘g‘ri burchakli parallelepipedning nechta qirrasi bor? Uning qirralari uzunliklari nimaga teng?

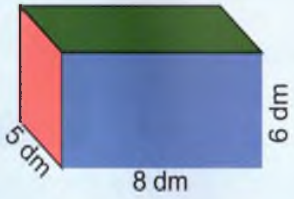
3. Bu shaklni katak daftarning bo‘sh varag‘iga ko‘chirib chizing. Shaklni qirqib olib, kerakli tomonini bo‘yang. Bu shakldan to‘g‘ri burchakli parallelepiped yasay olasizmi?



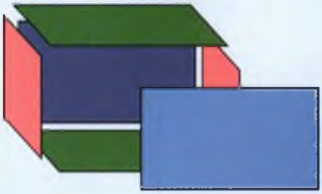
Yasalgan to‘g‘ri burchakli parallelepipedni oldingizga qo‘ying. Uning bo‘yalgan tomonini ko‘rsating.



4. Tadqiqot loyihasi: to‘g‘ri burchakli parallelepiped to‘la sirti yuzini topish.



a) To‘g‘ri burchakli parallelepipedning “yoyilgan” ko‘rinishini ko‘rib chiqing. Uning yoqlari nechta? Uning bir xil yoqlari nechta?



b) Uning ko‘k rangli yoqlari nechta? Bitta ko‘k yog‘ining yuzi nimaga teng? Barcha ko‘k rangli yoqlari yuzlari yig‘indisi nimaga teng?



d) Uning qizil rangli yoqlari nechta? Bitta qizil yog‘ining yuzi nimaga teng? Barcha qizil rangli yoqlari yuzlari yig‘indisi nimaga teng?



e) Uning yashil rangli yoqlari nechta? Bitta yashil yog‘ining yuzi nimaga teng? Barcha yashil rangli yoqlari yuzlari yig‘indisi nimaga teng?



f) To‘g‘ri burchakli parallelepiped barcha yoqlari yuzlari yig‘indisini toping.

5. Istirohat bog‘idagi yo‘laklar bo‘ylab 23 ta, sahna oldiga esa undan 3 marta ko‘p o‘rindiq o‘rnatildi. Istirohat bog‘ida hammasi bo‘lib nechta o‘rindiq o‘rnatilgan?

6. Misollarni yeching. Darsning boshidagi rasmda ko‘rsatilgan o‘rindiqlar o‘rnatilgan yumaloq maydoncha nima deb ataladi?

A	2 893 + 4 579	**O**	5 690 + 1 082
E	52 000 – 48 839	**R**	8 795 – 1 927
I	20 475 : 9	**T**	28 856 : 8
M	38 · 78	**F**	45 · 62

7 472	2 964	2 790	2 275	3 607	3 161	7 472	3 607	6 868

7. Istirohat bog‘iga kirishda 20 ta chipta uchun 350 000 so‘m to‘lanishi kerak. Agar 37 ta chipta olinsa, qancha ko‘p to‘lash kerak bo‘ladi?

8. To‘rtta 4 raqamini yozing. Ular orasiga arifmetik amallar va qavslarni shunday qo‘yingki, 0, 1, 2, 3, 4, 5, 6, 7, 8 sonlari hosil bo‘lsin.

9. Amallar tartibiga rioya qilgan holda hisoblang.

1 827 · 4 : 9 + 3 612 28 930 – 6 000 : 150

800 : 16 + 20 · (39 – 16) 2500 : 100 · 14 + 4 310

10. Jasurning to‘g‘ri to‘rtburchak shaklidagi akvarium qopqog‘i sinib qoldi. U shishadan boshqa qopqoq yasashga buyurtma berdi. Akvariumning bo‘yi 42 cm, eni bo‘yidan 17 cm qisqa, balandligi esa 35 cm. Bu akvarium qopqog‘ining yuzi qanday bo‘ladi?

89. Doira va aylana

Yondosh mavzu:
shahar landshafti.

Doira, aylana,
radius, diametr.





1. Rasmdagi narsalar qanday shaklda? Ularda qanday umumiylik bor? Ular nimasi bilan farq qiladi?



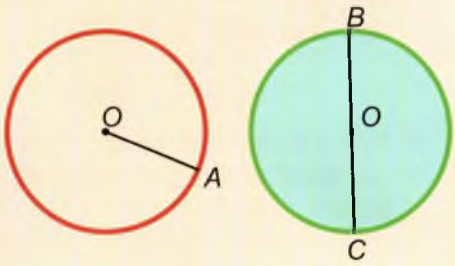






2. Rasmlarni ko'rib chiqing. Doira va aylananing elementlarini aytib bering.

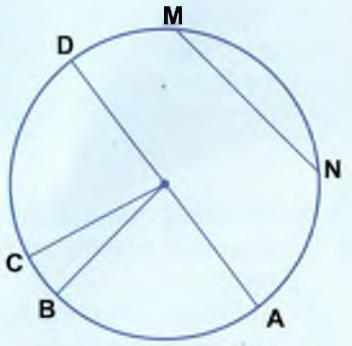
- Aylananing markazi
- Doiraning markazi
- Radius
- Diametr
- Ichki soha
- Doiraning chegarasi





Aylana bilan doira bir-biriga bog'liq: aylana – bu doiraning chegarasi, doira esa aylana va uning ichki sohasi.
Aylana bir nuqtaning atrofida yasaladi. Bu nuqta aylananing markazi deyiladi.
Aylananing markazi bilan uning istalgan nuqtasini tutashtiruvchi kesma radius deb ataladi.
Aylananing markazidan o'tib, uning ikkita nuqtasini tutashtiruvchi kesma diametr deb ataladi.

3. Daftaringizga aylananing barcha radiuslarini chizing. Chizg'ich bilan aylananing istalgan bir radiusini o'lchang va uning uzunligini yozing.



4. Yumaloq maydonchaning diametri 40 m 6 dm. Bu maydonchaning radiusini toping.



5. Istirohat bog'ini ko'kalamzorlashtirish uchun chinor, qayrag'och va akatsiya ko'chatlari keltirildi. Hammasi bo'lib nechta ko'chat olib kelingan?



78 ta ko'chat



18 ta ko'p ko'chat



3 marta kam ko'chat

6. Bo'lishni bajaring. Uch xonali javoblarni o'sish tartibida joylashtiring. Bir yoki ikki tomoniga daraxtlar ekilgan yo'lak qanday ataladi?

X	1 325 : 5	**I**	3 780 : 12	**N**	4 080 : 2
O	6 186 : 6	**Y**	3 192 : 7	**B**	8 940 : 10
O	5 588 : 11				

7. Hisoblang.

90 · 100	58 · 1 000	305 · 1 000
10 000 · 28	1 000 · 621	100 000 · 293
50 · 300	200 · 70	6 000 · 3 000

8. Murakkab masalalarni yeching. Har bir band uchun ifoda tuzing. Ularning qiymatlarini noma'lumlarning berilgan qiymatlarida hisoblang.

a) Bog'da tomoni *a* bo'lgan kvadrat shaklidagi gulpushtilar o'rnatildi. Har bir gulpushtining yuzini toping. (a = 1 m 8 dm)

b) Bitta gul uchun b cm^2 yer kerak. Bitta bunday gulpushtiga nechta gul eksa bo'ladi? (b = 9 cm^2)

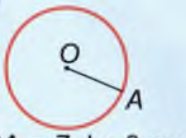
d) Bog'da n ta yumaloq va undan 2 marta ko'p kvadrat gulpushti bor. Bog'da jami nechta gulpushti bor? (n = 12)

e) Agar yumaloq gulpushtiga ham, kvadrat gulpushtiga ham bir xil miqdorda gul ketsa, bu gulpushtilar uchun jami nechta gul ko'chati olib kelish kerak?

9. Jasur, Madina, Aziza va Akmal bog'da arg'imchoq uchishyapti. Uch kishi uchayotgan paytda bir kishi rukzaklarga qarab turdi. Agar Jasur hammadan ko'p – 10 marta, Aziza esa hammadan kam – 7 marta uchgan bo'lsa, har bir bola necha martadan arg'imchoq uchgan?

10. 570 240 soni 2, 3, 4, 5, 6, 7, 9 va 11 sonlaridan qaysi biriga bo'linmaydi?

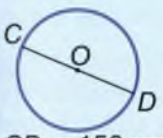
11. Qaysi doiraning diametri eng katta?



OA = 7 dm 3 cm



OB = 72 cm



CD = 156 cm



OM = 740 mm

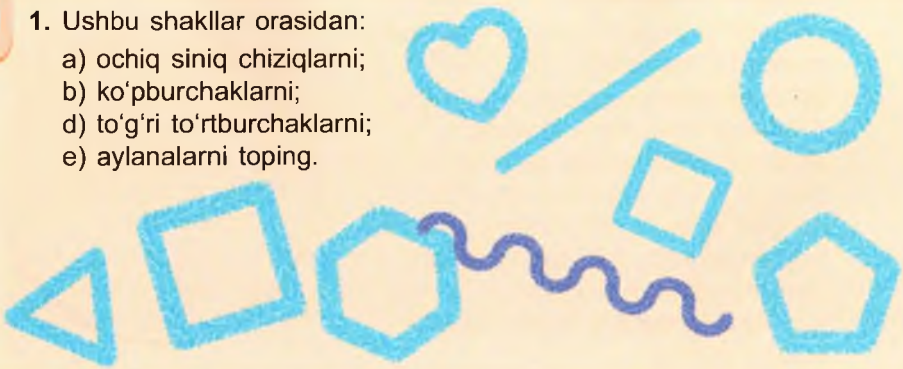
Yondosh mavzu:
bayramlar.

Aylana, radius,
sirkul.

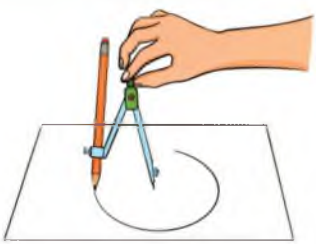




1. Ushbu shakllar orasidan:
a) ochiq siniq chiziqlarni;
b) ko'pburchaklarni;
d) to'g'ri to'rtburchaklarni;
e) aylanalarni toping.



Aylana sirkul yordamida yasaladi:
1) Aylananing markazi bo'lgan nuqta belgilanadi.
2) Sirkul ignali uchi bilan qalamli uchi orasidagi masofa radiusga teng bo'ladigan qilib ochiladi.
3) Sirkulning holatini o'zgartirmagan holda, ignali uchini aylananing markaziga qo'yib, uning atrofida qalamli uchi bilan aylana chiziladi.





2. Aylana markazini belgilang. Shu markazdan ikkita aylana chizing: birining radiusi 5 cm, ikkinchisining radiusi esa undan 20 mm kichik bo'lsin. Birinchi aylananing ikkinchi aylanaga kirmaydigan qismini bo'yang.

3. Daftaringizda 4 cm uzunlikda kesma yasang. Shunday radiusli aylana yasang. Bu aylanada 3 ta radius o'tkazing. Bu radiuslar aylanani nechta bo'lakka bo'ladi?

4. Tadqiqot ishi. Ko'zingiz qanchalik o'tkir, qo'lingiz qanchalik aniq ishlashini tekshiramiz.

a) Daftaringizda *O* nuqtani – aylananing markazini belgilang.
b) *O* nuqtadan o'ng tomonga 3 cm uzunlikda *OA* kesma ajrating.
d) Sirkul ishlatmasdan, qo'lingiz bilan *O* nuqta atrofida radiusi 3 cm bo'lgan aylana chizib ko'ring. Qalamni qog'ozdan uzib, aylanani bo'laklab chizishingiz ham mumkin.
e) Sirkul yordamida 3 cm radiusli aylana chizing.



f) O'zingiz qo'lda chizgan aylana bilan sirkulda chizilgan aylanani solishtiring. Chiziqlar qanchalik ustma-ust tushdi yoki tushmadi?

5. Qulay usulda hisoblang.

583 + 186 + 417 + 114
567 890 – (67 890 + 29 000)
(230 000 + 213 759) – 13 759
56 · 5 · 2 · 4 · 25
459 + 819 + 541
320 – (187 + 120)
(726 + 385) – 426
8 · 426 · 125

6. Azizaning tug'ilgan kuni munosabati bilan onasi uyni sharlar bilan bezatdi. U mehmonxonaga 18 ta shar ildi. Bu yo'lakka ilingan sharlardan 7 ta kam, Azizaning xonasiga ilingan sharlardan esa 5 ta ko'p. Uyga jami nechta shar ilingan?

7. Katakchalarga shunday sonlar yozingki, tengliklar to‘g‘riligicha qolsin.

481 + □ = 491
256 + □ = 256 + 118
518 · □ = 0
972 : □ = 1
800 – □ = 800
900 – □ = 899
□ : 602 = 0
1 · □ = 445

8. Matn bo‘yicha tenglamalar tuzing. Ularni tekshirishlar bilan yeching.

a) Bayram sovg‘asining ichida x ta konfet bor. Jami 80 ta sovg‘a tayyorlangan. Agar hamma sovg‘alarga 960 ta konfet ketgan bo‘lsa, x ni toping.

b) Vatan himoyachilari kuniga qiz bolalar 270 ta, o‘g‘il bolalar esa y ta tabriknoma tayyorlashdi. Jami 420 ta tabriknoma tayyorlangan bo‘lsa, y ni toping.

9. Doirachalar ichiga 1, 2, 3, 4, 5, 6, 7, 8 sonlarini shunday joylashtiringki, har bir chiziq bo‘ylab sonlar yig‘indisi bir xil bo‘lsin. Doiraning o‘zini ham chiziq deb hisoblang. Har bir sondan faqat bir marta foydalanish mumkin.



10. Tenglamalarni tekshirishlar bilan yeching.

$x \cdot 3 = 201 \cdot 20$
$y : 30 = 521 + 427$

11. Bayram bezagi yasaladigan yumaloq taglikning diametrini o‘lchang. Daftaringizda xuddi shunday diametrli aylana yasab, unga 6 ta radius o‘tkazing. Hosil bo‘lgan bo‘laklarni har xil ranglarga bo‘yang. Nechta bo‘lak hosil bo‘ldi?



91. Aylana yordamida naqsh chizish

Yondosh mavzu:
ornament.

Doira, aylana,
radius, diametr.



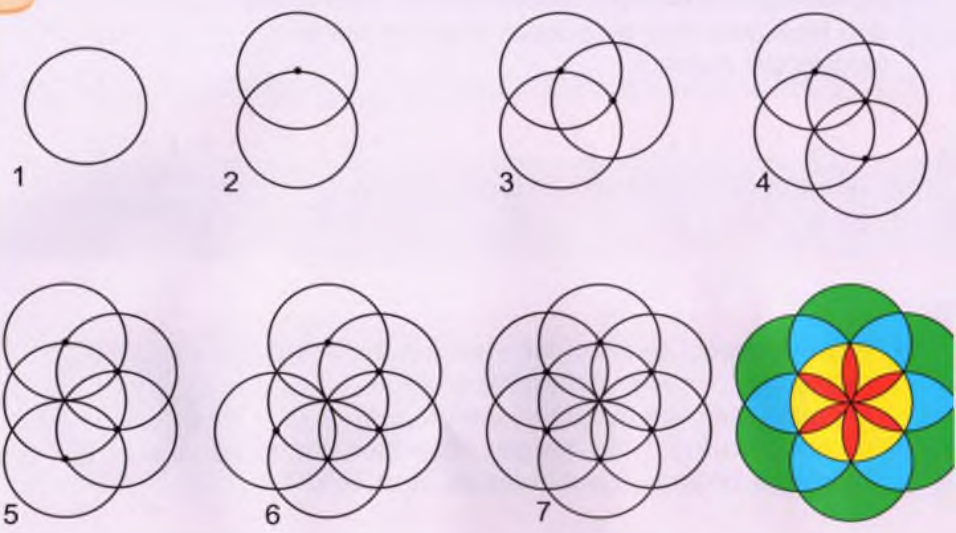


1. Rasmlarga qarang va qanday qilib sirkulsiz aylana chizish mumkinligini tushuntiring. Shu usullardan biri bilan aylana chizing.





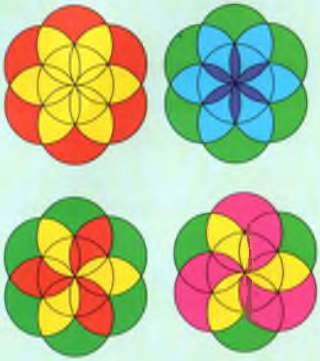
2. Sirkul yordamida gulni qanday chizish mumkinligini o‘rganib oling.



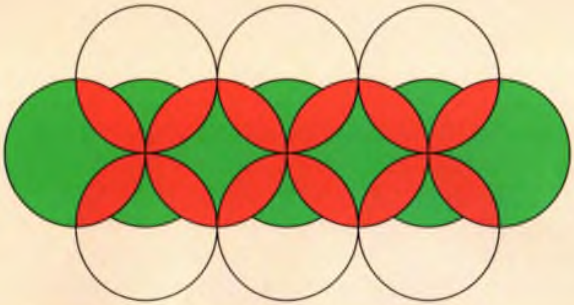
3. Qoidalardan foydalanib, o‘z gulingizni chizing va uni o‘zingiz istagan ranglarga bo‘yang.

Qoidalar

1. Sirkul bilan aylana chizing.
2. Sirkulning holatini o‘zgartirmagan holda, uning ignasini aylananing istalgan joyiga qo‘yib, yana aylana chizing.
3–7. Har bir yangi aylananing birinchi aylana bilan kesishish nuqtasini keyingi aylanalar uchun markaz qilib oling.
8. Hosil bo‘lgan gulni bo‘yang.



4. Bu naqshni qanday chizishni o‘rganing. O‘z naqshingizni chizing.



5. Amallarni bajaring.

935 750 – 380 · (490 : 70) · 10

(2748 + 3696) : 6 · 20 + 178 320

6. Chiziq va aylanalardan o‘zingiz yangi naqsh o‘ylab toping. Uni daftaringizga chizing va bo‘yang.

Yondosh mavzu:
vitraj.

Aylana, radius,
sektor.





1. Rangli shisha bo‘laklaridan ishlangan rasm vitraj deb ataladi. Ko‘pincha xonalarni bezatish uchun deraza o‘rniga vitraj qo‘yiladi. Vitrajlarning turlarini ko‘rib chiqing. Bu vitrajlarni simmetrik bo‘laklardan tuzilgan deyish mumkinmi?







2. Alohida varaqda 6 cm diametrli aylana yasang va uni qirqib oling. Bu shakl doira deyiladimi yoki aylanami? Shaklning o‘rtasidan ikki buklang. U necha bo‘lakka bo‘lindi? Keyin uni yana ikki buklang. Endi nechta bo‘lak hosil bo‘ldi?





Doiraning markazidan istalgan miqdorda radius o‘tkazish mumkin. Agar doira radiuslar bilan bo‘laklarga bo‘linsa, natijada hosil bo‘lgan har bir bo‘lak sektor deb ataladi.



3. Daftaringizda doira yasang.

a) Gorizontal bo‘yicha diametr o‘tkazing. Doira necha bo‘lakka bo‘lindi?

b) Vertikal bo‘yicha diametr o‘tkazing. Endi doira necha bo‘lakka bo‘lindi?

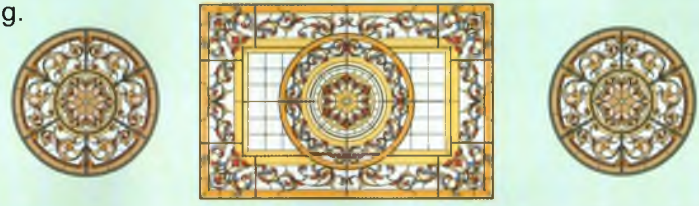
d) Sektorlardan birini bo‘yang. Har bir sektorning burchagi haqida nima deyish mumkin?

4. Amallarni tushuntirish bilan bajaring. Javoblarni tekshiring.

8 302 + 2 938 7 305 – 2 879 895 · 56 2064 : 8

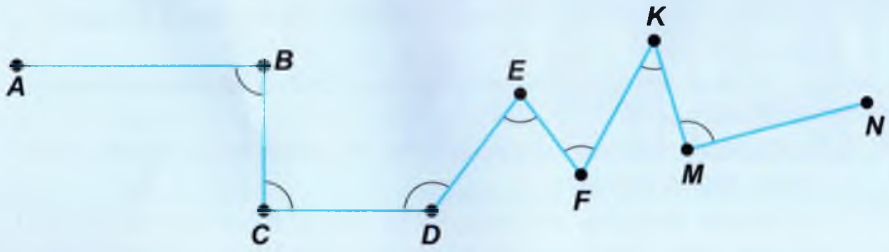
5. Rangli va shaffof shisha bo‘laklaridan vitraj yasaldi. Bunda shaffof bo‘laklar rangli bo‘laklardan 3 marta ko‘p. Agar vitrajga hammasi bo‘lib 596 ta shisha bo‘lagi ishlatilgan bo‘lsa, shaffof shishadan necha bo‘lak ishlatilgan?

6. Vitraj yasash uchun uch bo‘lak – bittasi to‘g‘ri to‘rtburchak shaklida, ikkitasi esa yumaloq shaklda bo‘lgan shisha bo‘lagi kerak. To‘g‘ri to‘rtburchak shaklidagi bo‘lakning bo‘yi 1 m 3 dm, eni esa 80 cm. Agar har bir yumaloq shishaning yuzi to‘g‘ri to‘rtburchak shaklidagi shishaning yuzidan 2 marta kichik bo‘lsa, vitrajning umumiy yuzini toping.



7. Agar yumaloq vitrajlarning bo‘laklari soni 12 ga bo‘linishi kerak bo‘lsa, unda nechta sektor bo‘lishi mumkin? 3 ta misol keltiring.

8. Vitraj siniq chiziq shaklidagi mis tasma bilan o'ralgan.

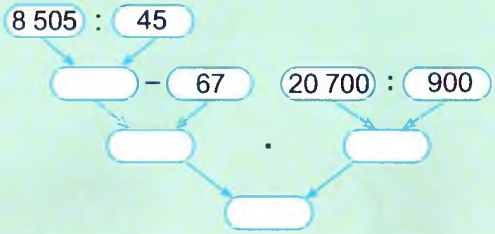


Burchaklarni uchta ustunga yozing.

O'tkir burchaklar	To'g'ri burchaklar	O'tmas burchaklar

9. Vitraj chizmasining o'lchamlari 30 cm va 40 cm. Tayyor vitrajning yuzi 48 m^2 bo'lsa, uning eni va bo'yini toping.

10. Sxemadan foydalanib, ifoda tuzing va uni hisoblang.



11. Vitraj san'ati ko'rgazmasi uch kun ochiq bo'ldi. Birinchi kun unga 1417 nafar, ikkinchi kun esa birinchi kundagidan 218 nafar ko'p odam keldi. Agar uch kun ichida ko'rgazmaga 4924 nafar odam kelgan bo'lsa, uchinchi kun ko'rgazmaga necha nafar odam kelgan?

Yondosh mavzu:
pazandachilik san'ati.

Doira, aylana, radius, diametr, sektor, doira qismi.





1. Aziza kivi mevasini bo'laklarga bo'ldi. U har bir holda mevani necha bo'lakka bo'lgan?





Ulushlar o'z nomiga ega.





Butun



Yarim.
Ikkidan bir ulush

$\frac{1}{2}$



Uchdan bir.
Uchdan bir ulush

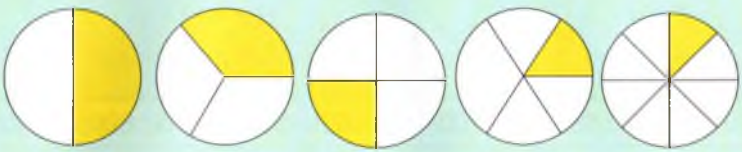
$\frac{1}{3}$



Chorak.
To'rtdan bir ulush

$\frac{1}{4}$

2. Rasmlar bo'yicha ulushlar nomini yozing.



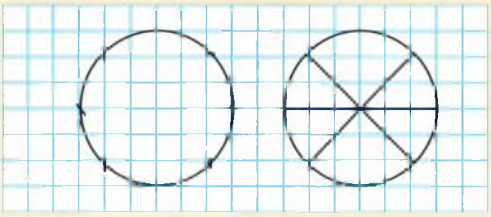
3. Uchta bir xil doira chizing.

a) birinchi doirani ikkita teng bo'lakka bo'lib, yarmini bo'yang.

b) ikkinchi doirani to'rtta teng bo'lakka bo'lib, chorak qismini bo'yang.

d) uchinchi doirani 8 ta teng bo'lakka bo'lib, sakkizdan bir qismini bo'yang.

4. Amaliy ish. Doiraning oltidan bir qismini belgilash.



Ish rejasi.

1) Markazi *O* nuqta bo'lgan 4 cm radiusli aylana chizing.

2) Aylanada istalgan biror nuqtani belgilang. Shu nuqtadan sirkul yordamida aylanaga xuddi shunday radiusda kesishma yasang.

3) *O* markazdan shu 6 ta kesishmaga radiuslar o'tkazsangiz, 6 ta sektor hosil bo'ladi.

4) Bitta sektorni bo'yang.

5. Massasi 4 kg 400 g bo'lgan bayram torti 12 bo'lakka bo'lindi. Bayramda tortning 9 bo'lagi yeyilgan bo'lsa, necha gramm tort qoldi?

6. Hisoblang. "Beze" pishirig'ining yana qanday nomi borligini toping.

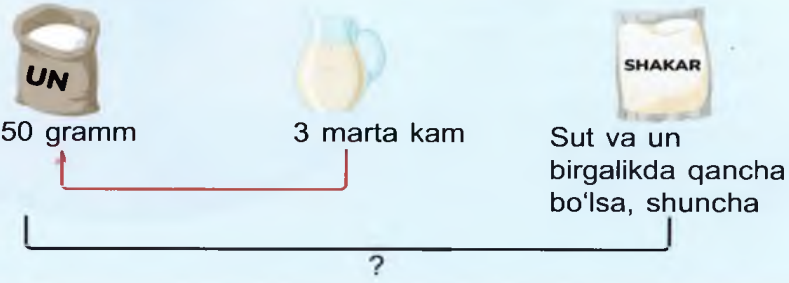
G	740 · 70	**M**	720 464 : 8
E	5 097 · 6	**N**	155 160 : 4
A	23 · 380	**R**	1 176 000 : 80

90 058	30 582	14 700	30 582	38 790	51 800	8 740

7. Katakchalarga sonlarni shunday qo'yingki, natijada to'g'ri tengliklar hosil bo'lsin. Har bir ustundagi misollarda qanday umumiylik bor? Qaysi tenglik uchun bir nechta yechim topish mumkin?

$49 \cdot \square = 78 \cdot 49$	$493 + \square = 493$	$396 \cdot \square = 396$
$\square \cdot 35 = 83 \cdot \square$	$\square + 0 = 192$	$\square \cdot 1 = 632$
$6 \cdot \square = \square \cdot 6$	$\square + 0 = \square$	$1 \cdot \square = \square$

8. Tort pishirish uchun sut, shakar, un kerak.



9. Ikkita stakan bilan ikkita ko'zaning massasi 14 ta likopchaning massasi bilan bir xil. Agar bitta ko'zaning massasi bitta stakan bilan bitta likopchaning massasiga teng bo'lsa, bitta ko'zaning massasi nechta likopchaning massasiga teng bo'ladi?

10. Amallar tartibiga rioya qilgan holda hisoblang. Bu yerda qaysi pishiriqning nomi yashiringan?

$840 \cdot 40 + 963\,000 : (63\,700 : 70 - 10)$

A 6 190	**I** 15 970	**L** 33 600	**E** 910
E 1 070	**K** 900	**R** 34 670	

11. 36 ta pishiriq tayyorlash uchun 4 kg 320 g un kerak. 25 ta pishiriq tayyorlash uchun qancha un kerak bo'ladi? 40 ta pishiriqqa-chi? 120 ta pishiriqqa-chi?

94. Doiraning ulushi. Soatlar va minutlar

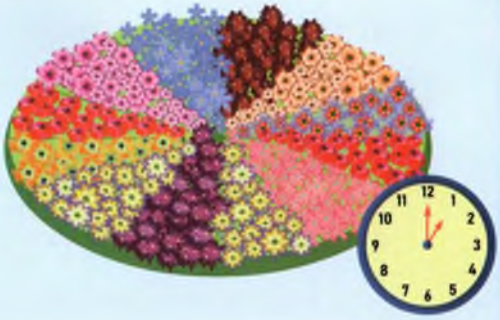
Yondosh mavzu:
soat turlari.

Aylana, radius,
sektor.





1. O'ngda oddiy soat, chapda gulsoat tasvirlangan. Ularda qanday umumiylik bor? Nimasi bilan farq qiladi? Gulsoat nechta bo'lakka bo'lingan?



2. a) Agar soatlar bo'yicha hisoblasak, siferblat nechta bo'lakka bo'lingan? Agar minutlar bo'yicha hisoblansa-chi?
b) Sariq sektor bu aylananing qanday qismini tashkil qiladi? Javobingizni tushuntirib bering.





Bir soatda 60 minut bor.
1 h = 60 min
Bir minut soatning oltmishdan bir qismini tashkil qiladi.
1 min = $\frac{1}{60}$ h.

3. Minut mili bir soatda bir marta to'liq aylanadi. Bu minutlar soatning qanday ulushini tashkil qiladi?



4. Yozing:

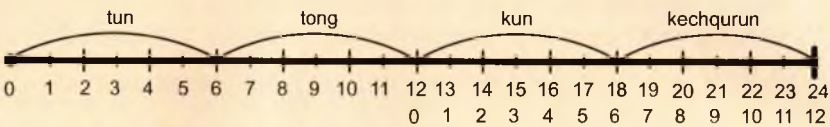
a) 4 minutda, 25 minutda, 1 soatda necha sekund bor?

b) 120 sekundda, 360 sekundda, 4 soatda necha minut bor?

d) 7200 sekundda, 3 sutkada, 1 haftada necha soat bor?

5. Darslar 8:00 da boshlanib, 12:30 da tugaydi. Shu vaqt ichida necha to'liq minut o'tadi? Necha to'liq sekund o'tadi?

6. Bu sxemada bir sutkada elektron va mexanik soatlarda vaqtning qanday belgilanishi ko'rsatilgan.



Soat 15:00 ni, kechki soat 17 ni, 20:20 ni, 22 h 30 min ni, 21:50 ni yana qanday aytish mumkin? "Yarim kun" yoki "yarim tun" so'zlari bilan soat necha bo'lganini bilamiz?

7. Hisoblang:

7 h 25 min – 3 h 28 min

18 min 58 s + 13 min 39 s

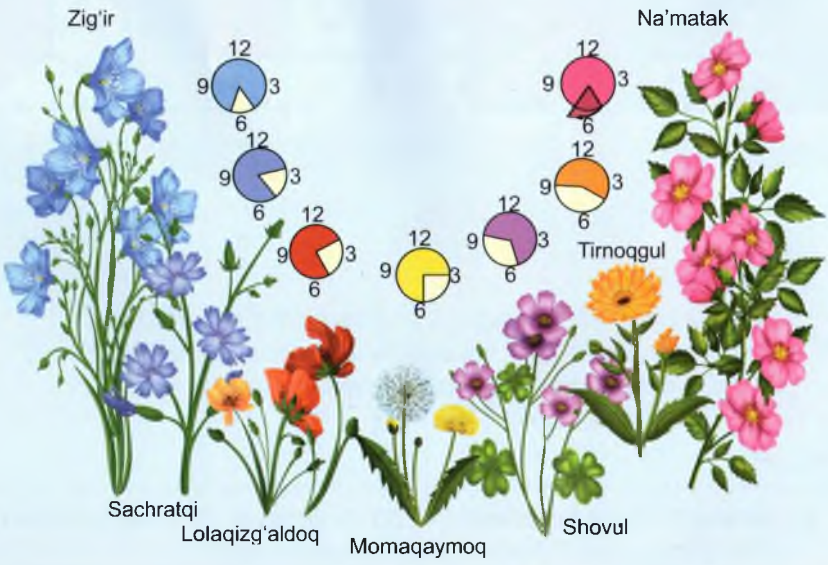
5 h 14 s + 3 h 17 s

5 h 29 min + 8 h 34 min

45 min 22 s – 12 min 48 s

8 h 20 s – 2 h 124 s

8. Ko‘pgina gullarning aniq ochilish va yopilish vaqtlari bo‘ladi. Bu gullar taxminan qancha vaqt ochiq turishini hisoblang.



9. Hisoblang.

3 h 46 min + 7 h 19 min – 2 h 55 min = ... min
80 s · 14 – 12 min 15 s + 64 000 s : 32 = ... s
1 hafta + 38 soat = ... soat
1 mart + 1 aprel + 1 may = ... kun

10. Madina biologiya to‘garagi mashg‘ulotiga qachon kelganini toping. Mashg‘ulot qachon tugagan? Mashg‘ulot qancha vaqt davom etgan?



Mashg‘ulotning boshlanishi



Mashg‘ulotning tugashi

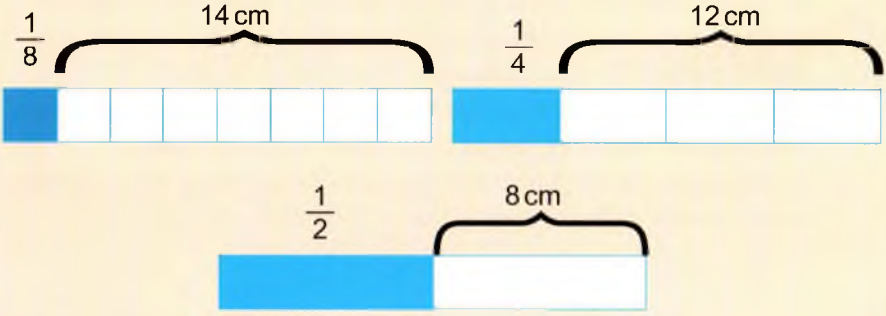
Yondosh mavzu:
fokuslar.

Doira, aylana, radius, diametr, sektor, doiraning qismi.





1. Madina uzunligi 16 cm bo'lgan bir nechta qog'oz tasmalar tayyorladi. U har bir tasmaning berilgan qismini kesib olishi kerak. Madina qolgan qismlarning uzunligini qanday hisoblagan bo'lishi mumkin?





Sonning $\frac{1}{n}$ ulushini topish uchun uni n ta teng bo'laka bo'lish kerak. Bu $\frac{1}{n}$ ulush "n dan bir qism" deb o'qiladi.

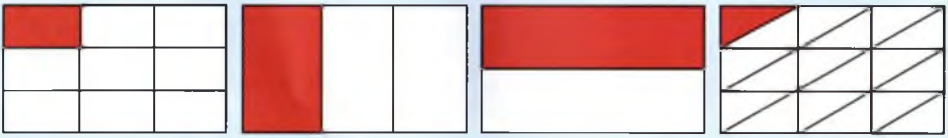
2. Daftaringizda uzunligi 12 cm bo'lgan uchta tasma chizing.

a) birinchi tasmaning $\frac{1}{2}$ qismini bo'yang;

b) ikkinchi tasmaning $\frac{1}{3}$ qismini bo'yang;

d) uchinchi tasmaning $\frac{1}{4}$ qismini bo'yang.

3. To‘g‘ri to‘rtburchakning yuzi 48 cm^2 ga teng. Bo‘yalgan qismining yuzini toping. Bu qismni butunning ulushi sifatida yozing.



4. Ifodalar tuzing va ularning qiymatlarini hisoblang.
Sinfda 36 nafar o‘quvchi bor.

a) O‘quvchilarning yarmi – qizlar. Sinfdagi qizlar necha nafar?

b) O‘quvchilarning uchdan biri matematik fokuslar tayyorlagan. Necha nafar o‘quvchi matematik fokus tayyorlagan?

d) O‘quvchilarning chorak qismi tanga bilan fokus ko‘rsata oladi. Necha nafar o‘quvchi tanga bilan fokus ko‘rsata oladi?

e) O‘quvchilarning to‘qqizdan bir qismi arqon bilan fokus ko‘rsata oladi. Necha nafar o‘quvchi arqon bilan fokus ko‘rsata oladi?

5. Sirkdagi tomosha 12:30 da boshlanib, 2 soat 20 minut davom etdi. Tomosha soat nechada tugagan?

6. Matematik fokusning sirini toping.

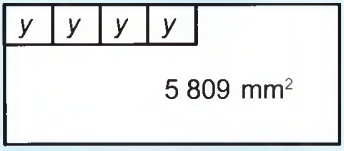
a) Istalgan sonni o‘ylang.
b) Bu sonni 3 ga ko‘paytiring.
d) Ko‘paytmaga 12 ni qo‘shing.
e) Yig‘indini 3 ga bo‘ling.
f) Bo‘linmadan o‘ylagan soningizni ayiring.
g) Natija 4 chiqdi.

7. Geometrik fokus: daftar varag‘ini bitta odam sig‘adigan qilib qirqa olasizmi?

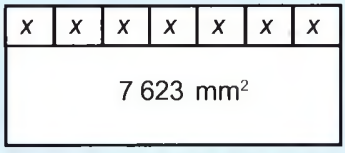
8. Ifodalarni solishtiring.

732 : 6 ☐ 372 : 6	726 + 139 ☐ 139 + 726
665 : 5 ☐ 665 : 7	805 + 421 ☐ 422 + 806
308 : 7 ☐ 308 · 7	142 + 131 ☐ 142 – 131

9. Grafik modeldan foydalanib, tenglama tuzing.



Umumiy yuzi: 6909 mm²



Umumiy yuzi: 13083 mm²

10. Matematik fokusning sirini toping.

a) 1 dan 9 gacha istalgan sonni o'ylang.
b) Xayolan bu sonning davomiga yana shunday ikkita raqam yozing.
d) Hosil bo'lgan sonni 3 ga bo'ling.
e) Bo'linmani 37 ga bo'ling.
f) Javobni yozing – bu siz o'ylagan sonning o'zi!

11. Amallar tartibiga rioya qilib hisoblang. "Fokus" so'zini yana qanday atash mumkin?

(32 · 5 + 8 765) : 3 + 24 400 : 4 : 100 – 2 900 + 64

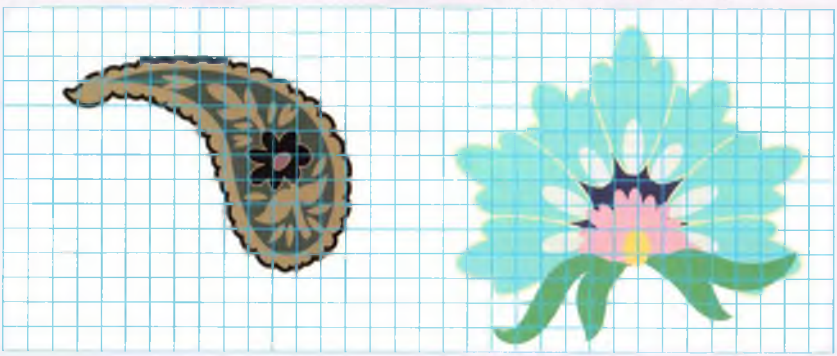
A 200	**I** 160	**L** 2 975	**U** 6 100
I 3 036	**L** 8925	**Z** 61	**Y** 136

12. Majlislar zalida har birida 45 tadan o'rindiq bo'lgan 18 ta qator bor. 276 ta o'rindiqqa tomoshabin kelib o'tirgan bo'lsa, yana nechta bo'sh o'rindiq qolgan?

Biz nimalarni bilib oldik? Biz nimalarni o‘rgandik?

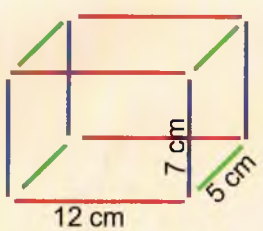
Biz paletka bilan tanishdik.

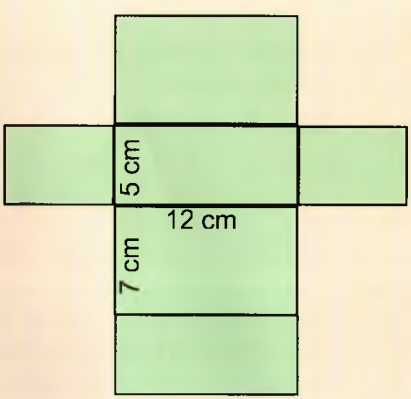
1. Paletka yordamida bu shakllardan birining yuzini aniqlang.



Biz to‘g‘ri burchakli parallelepiped va uning yoyilmasi bilan tanishdik.

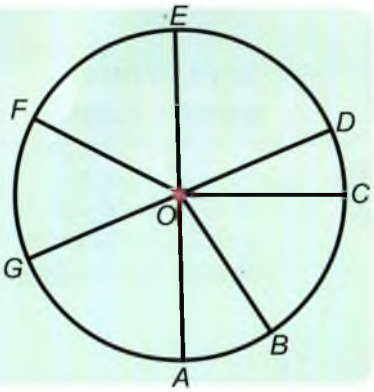
2. To‘g‘ri burchakli parallelepipedning bo‘yi 12 cm, eni 5 cm, balandligi esa 7 cm. Toping:
a) shu parallelepipedning barcha qirralari uzunliklari yig‘indisini;
b) shu parallelepiped yoyilmasining yuzini.





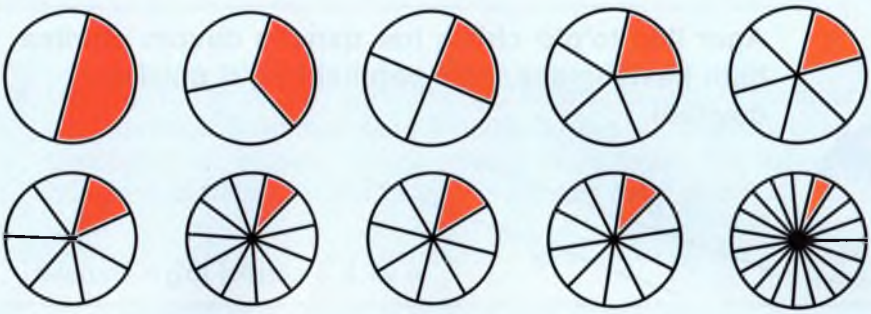
Biz aylana va doira bilan tanishdik.

3. a) Aylananing barcha radiuslari nomini yozing. Aylananing jami nechta radiusi bo'lishi mumkin?
b) Aylananing barcha diametrlari nomini yozing.
d) Chizg'ich bilan aylananing istalgan radiusini o'lchab, uzunligini yozing.
e) Bu aylana diametrining kattaligini toping.
f) Shu doirani daftaringizda yasang.



Biz doirani qismlarga bo'lishni o'rgandik.

4. Doiraning bo'yalgan ulushlarini yozing.



Biz kattaliklar bilan ishlash ko'nikmalarini mustahkamladik.

5. Amallarni bajaring. Har bir ustundagi ifodalar qanday umumiylikka ega?

735 g : 5	2 min 3 s · 18	4 m 48 cm + 56 cm
288 kg + 3 q 56 kg	7 h 33 min + 68 min	1 km 200 m : 6
3 t 5 q – 27 kg	2 h 3 s · 2	2 dm 3 cm · 7
4 t – 2 514 kg	546 s : 7	3 dm – 145 mm

Yondosh mavzu:
musiqa.

To‘g‘ri chiziqlar,
kesmalar, nurlar.



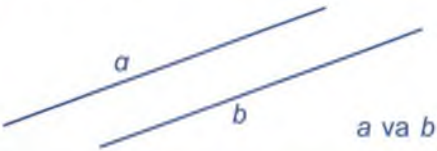


1. Ushbu musiqa asboblariga qarang. Ularda torlar bir-biriga nisbatan qanday joylashgan?



Agar ikki to‘g‘ri chiziq har qancha davom ettirilsa ham kesishmasa, ular parallel to‘g‘ri chiziqlar deyiladi.





a va *b* – parallel to‘g‘ri chiziqlar

2. Rasmdan bir xil rangdagi parallel to‘g‘ri chiziqlar juftligini toping.

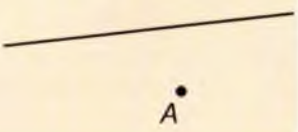


3. Gorizontal to‘g‘ri chiziq yasang. Uning tagidan ikki katak tashlab, yana bitta gorizontal to‘g‘ri chiziq yasang. Bu to‘g‘ri chiziqlar orasidagi masofa 2 katakdan ko‘p bo‘ladimi? Xulosani davom ettiring: parallel to‘g‘ri chiziqlar orasidagi masofa …

4. Daftaringizda nota chiziqlari – beshta parallel gorizontal chiziq chizing. Pastdan birinchi va uchinchi chiziqda joylashadigan notalarni yozing. Bu qaysi notalar?



5. To‘g‘ri chiziq o‘tkazing. Bu chiziqda yotmaydigan *A* nuqtani belgilang. Qizil qalam bilan *A* nuqtadan o‘tadigan va birinchi to‘g‘ri chiziqqa parallel bo‘lgan to‘g‘ri chiziq chizing.



6. Uzunligi 12 cm bo‘lgan gorizontal *MC* kesma yasang. *M* nuqtadan o‘ng tomonga 6 cm masofada *S* nuqta qo‘ying. *C* nuqtadan chap tomonga 3 cm o‘lchab, *I* nuqta qo‘ying. *M* nuqtadan o‘ng tomonga 30 mm masofada *U* nuqta qo‘ying. Kesmada qaysi so‘z hosil bo‘ldi?

7. Eng kichik o‘lchov birligiga o‘tkazib, hisoblang.
8 m 23 cm + 5 m 86 cm – 245 cm
(12 km + 15 000 m – 4 km) : 2
(700 cm – 1 m 2 dm 9 cm + 6 m 29 cm) : 3

8. Bu yerda qaysi son ortiqcha: 15, 37, 18, 21, 3, 96, 48, 60? Javoblar bir nechta bo‘lishi mumkin.

9. Musiqiy tanlovda faqat trio va kvartetlar ishtirok etadi (trio – uch kishilik, kvartet – to‘rt kishilik ijrochilar guruhi). Tanlovda qatnashishga jami 7 ta kvartet ariza bergan. Agar tanlovda jami 76 ishtirokchi qatnashgan bo‘lsa, unda nechta trio qatnashgan?

Jadvalni to‘ldiring.

	Bitta guruhda	Guruhlar soni	Jami qatnashchilar
Triolar			
Kvartetlar			

10. Tenglamalarni tekshirishlar bilan yeching.

$x \cdot 3 = 3\,470 + 1\,780$ $\qquad$ $y : 6 = 278 + 424$

11. Qonuniyatlarni aniqlab, qatorlarni davom ettiring.

18, 24, 20, 26, 22, 28, ...
45, 34, 44, 33, 43, 32, ...
4, 5, 9, 14, 23, 37, 60, ...
1, 4, 9, 16, 25, 36, 49, ...

12. Amallar tartibiga rioya qilgan holda hisoblang. Yana bitta torli musiqa cholg‘u asbobining nomini toping.

$806\,504 - (369\,022 - 167\,338) + 2 \cdot (3\,228 + 557)$

A 135 129	**N** 612 390	**M** 132 975	**N** 7 570
Q 201 684	**U** 604 820	**Z** 61 507	**O** 3 785

13. 6 ta avtobusda 35 nafardan uchinchi sinf o‘quvchilari va 5 ta avtobusda 42 nafardan to‘rtinchi sinf o‘quvchilari konservatoriyaga ketishyapti. Konservatoriyaga jami necha nafar o‘quvchi ketyapti?

Yondosh mavzu:
musiqa, qo‘shiq aytish.

Doira, aylana, radius, diametr, sektor, doiraning qismi.

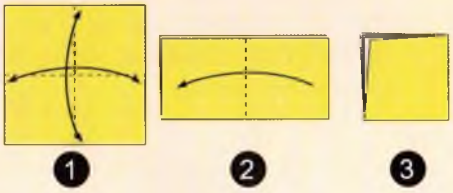




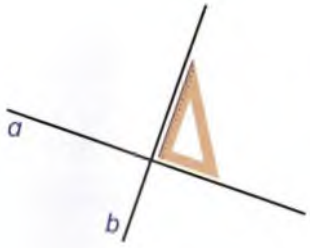
1. Rasmdan kesishmaydigan va kesishadigan to‘g‘ri chiziqlarni toping. Hech qachon kesishmaydigan to‘g‘ri chiziqlar qanday ataladi?



2. Tadqiqot. Bir varaq qog‘oz olib, o‘rtasidan buklang. Bukish chizig‘ini silliqlab, aniq ko‘rinadigan qiling. Endi varaqni yana o‘rtasidan buklang. Endi varaqni yoying. Bukish chiziqlari kesishdimi? Ular qanday burchak ostida kesishdi?



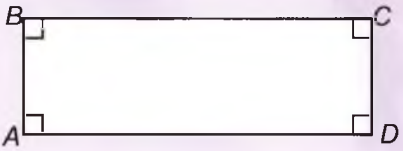


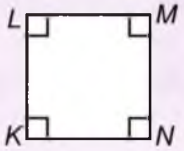


Agar to‘g‘ri chiziqlar to‘g‘ri burchak ostida kesishsa, ular perpendikular to‘g‘ri chiziqlar deb ataladi.

a va *b* – perpendikular to‘g‘ri chiziqlar

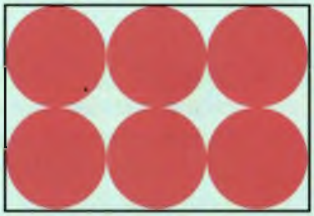
3. Rasmdan parallel va perpendikular chiziqlarni toping.





4. Uzunligi 10 cm bo‘lgan gorizontal *AB* kesma yasang. Uning o‘rtasida *O* nuqtani belgilang. *O* nuqtadan perpendikular to‘g‘ri chiziq o‘tkazing. Bu to‘g‘ri chiziqni qanday o‘tkazganingizni tushuntirib bering.

5. To‘g‘ri to‘rtburchakning ichiga bir xil radiusli doiralar joylashtirilgan. Har bir doiraning radiusi 2 cm. Bu to‘g‘ri to‘rtburchakning tomonlari va perimetrini toping.



6. Qo‘shiqchilik tanlovida 75 kishi qatnashyapti. Ularning uchdan bir qismi musiqa maktabida o‘qiydi, qolganlari esa havaskor qo‘shiqchilar. Tanlovda havaskorlar professional qo‘shiqchilardan necha marta ko‘p?

7. O‘quvchilar tarkibli ifodani hisoblayotib, quyidagi amallarni bajarishdi.

229 – 152 | 687 : 3 | 879 – 192

Ular bu amallarni qanday tartibda bajarishgan? Berilgan amallar tartibiga qarab, ifodani tiklashga harakat qiling.

8. Agar $a = 567$, $b = 198$, $c = 738$ ekani ma’lum bo‘lsa, ifodalarning qiymatini toping.

$2 \cdot a + 3 \cdot b$ $\qquad$ $(a + c) - b$

$7 \cdot (a + b - c)$ $\qquad$ $(a + b + c) : 9$

9. Tenglamalarni yeching.

$2 \cdot x + 234\,478 = 618\,324$ $\qquad$ $300\,000 - y \cdot 7 = 28\,687$

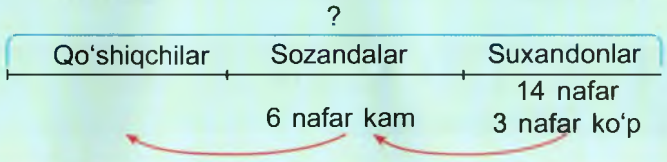
10. Aziza, Madina, Umida va Komil g‘ijjak, nay, chang va rubob chalishni o‘rganishyapti. G‘ijjakchi qiz bilan Aziza – yaqin dugonalar. Umida, Komil va rubobchi qiz musiqa maktabiga dushanba, chorshanba va juma kunlari, Madina, Aziza va changchi qiz esa seshanba, payshanba va shanba kunlari kelishadi. Aziza chaladigan musiqa asbobi rubobdan kichikroq, Umida esa chaladigan musiqa asbobi katta bo‘lgani uchun, u darsga faqat notalarini ko‘tarib keladi. Har bir qizning qaysi cholg‘u asbobini chalishini toping.

11. Amallar tartibiga rioya qilgan holda hisoblang. Bu yerda qaysi musiqiy atama yashiringan? Uning ma’nosi nima?

$532 - (1092 - 336) : 4 + 26 \cdot 41$

A 1 066	**I** 189	**O** 1 409	**P** 756
V 1 036	**L** 1 257	**N** 343	**R** 1 136

12. Sxema bo‘yicha masala o‘ylab toping va uni yeching.



Yondosh mavzu:
fotosuratlar.

Nur, belgi,
boshlanish nuqtasi.





1. O‘quvchilar sinfdoshlari tushgan fotosuratlar ko‘rgazmasini tashkil qilishdi. Qulay bo‘lish uchun ilgaklarni 1-, 2-, 3-, ... deb nomerlab chiqishdi. Sanoq bo‘yicha qaysi nomerdagi ilgaklarga fotosuratlar ilib qo‘yilgan?

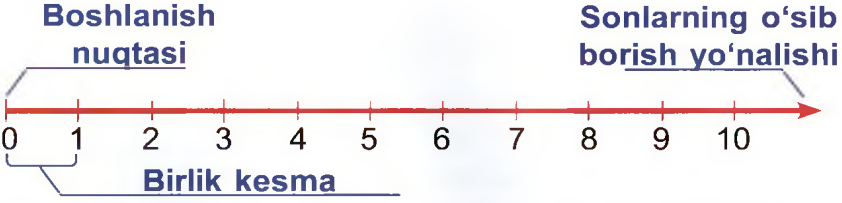


Sonlar tartibini belgilash uchun koordinata nuridan foydalanamiz. U barchamizga ma’lum bo‘lgan chizg‘ichga o‘xshaydi.



Koordinata nuri – bu sanoq boshi berilgan, sanoq yo‘nalishi ko‘rsatilgan va bir xil kesmalar shtrixlar – bo‘linmalar bilan belgilangan nur.





2. Koordinata nurida tushirib qoldirilgan sonlarni ayting.



3. Quyidagi algoritm bo'yicha koordinata nurini yasang.

a) Gorizontal chiziq chizing.

b) Chap tomonda nurning boshlanish nuqtasini belgilab, tagiga 0 sonini yozing.

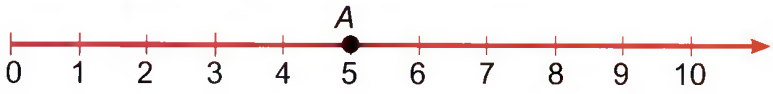
d) Nurning o'ng tomondagi uchiga sonlarning o'sib borish yo'nalishini bildiruvchi strelka qo'ying.

e) Sanoq boshidan boshlab, har ikkita katakdan keyin chiziqcha – shtrixlar qo'ying.

f) Barcha shtrixlar tagiga 1 dan boshlab, ketma-ket natural sonlar yozing.



Sonli nurda nafaqat sonlarni, balki nuqtalarni ham belgilash mumkin. Nuqta tagidagi son bu nuqtaning noldan qanday masofada turganini bildiradi. Bu masofa nuqtaning koordinatasi deb ataladi.



Belgilanishi: *A*(5)

4. a) Birligi 2 katak bo'lgan koordinata nuri yasang. Bu nurda *A*(3), *T*(8), *R*(5) koordinatali nuqtalarni belgilang. Qanday so'z hosil bo'ldi?

b) Noldan *A* yoki *R* nuqtalargacha bo'lgan masofa nimaga teng?

d) *A* va *R* hamda *A* va *T* nuqtalar orasidagi masofalarni toping.

5. Madina fotoalbomiga fotosuratlarni sanasiga qarab, tartib bilan yelimlab chiqmoqchi. Unga suratlarni eng eskisidan eng yangisiga qarab saralashga yordam bering.

2022-yil 25-yanvar	13.05.23
2021-yil 14-mart	20.11.20
2022-yil 3-dekabr	12.12.19

6. Amallarni bajaring.

12 km 350 m – 2 789 m	5 t 620 kg – 8 q 76 kg + 4 t 13 kg
8 m 27 dm + 43 dm 6 cm	2 kg 102 g – 769 g + 1 kg 475 g
7 dm^2 18 cm^2 – 2 dm^2 93 cm^2	4 378 l + 2 m^3 478 dm^3

7. Madinaning fotogalereyasida 336 ta fotosurat bor. Fotosuratlarning chorak qismi tog'larda, uchdan biri dengizda, qolganlari esa shaharda olingan. Fotogalereyada shaharda olingan nechta fotosurat bor?

8. Qutida jami 24 ta bo'lgan fotosuratlar, marka va taklifnomalar bor. Fotosuratlar taklifnomalardan 7 marta ko'p. Qutida nechta fotosurat, nechta marka va nechta taklifnoma bor?

9. Daftaringizda birligi 2 katak bo'lgan koordinata nurini yasang. Bu nurda quyidagi koordinatali nuqtalarni belgilang:
$A(153 : 51)$, $I(203 - 199)$, $N(729 : 81)$, $P(331 : 331)$, $T(143 : 13)$.
Qanday so'z hosil bo'ldi?

10. Kichik fotoalbomga 32 ta, kattasiga esa bundan 3 marta ko'p fotosurat sig'adi. Madinaning uyida bitta katta va 4 ta kichik fotoalbom fotosuratlar bilan to'lgan bo'lsa, bu uyda jami nechta fotosurat bor?

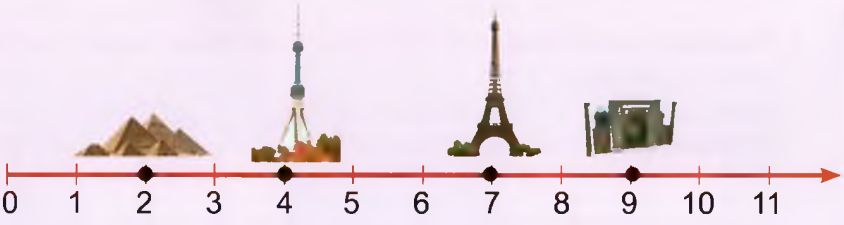
Yondosh mavzu:
sayohatlar.

Nur, bo'linish,
masofa.





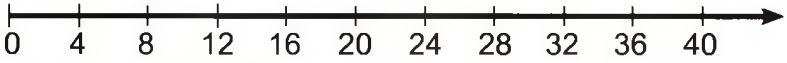
1. Tokchaga mashhur binolar va haykallarning maketlari terib qo'yilgan. Ularning koordinatalarini ayting.



Qaysi maket 0 dan eng uzoqda joylashgan? Qaysi maketning koordinatasi eng katta?



Ko'pincha koordinata nurida hamma natural sonlar ham belgilanavermaydi. Ko'proq sonlarni joylashtirish maqsadida sonli nur quyidagicha tasvirlanishi ham mumkin.



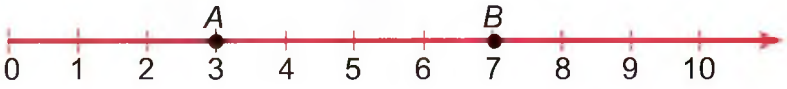
2. Har bir holatda bo'linish qiymati nimaga teng?





Nuqtaning koordinatasi – bu nurning boshidan shu nuqtagacha bo'lgan masofa. Koordinatasi kichikroq nuqta sonli nurda koordinatasi kattaroq nuqtadan chaproqda yotadi.





$3 < 7$

3. Sonlarning koordinatalarini solishtirish orqali qaysi nuqta chaproqda yotishini aniqlang.

$A(29)$ va $B(78)$	$C(456)$ va $D(219)$	$E(1094)$ va $F(2001)$
$O(0)$ va $K(11)$	$L(92)$ va $N(29)$	$M(2933)$ va $P(293)$

4. Koordinata nurini yasab, unda quyidagi nuqtalarni belgilang.

$A((1\,728 - 28 \cdot (96 - 45)) : 100)$,

$B(400 - 320 : (56 - 48) - 349)$.

Qaysi nuqta chaproqda yotadi?

5. Aziza ota-onasi bilan o'zi yashaydigan viloyatni aylanib chiqdi. U bosib o'tgan yo'lini sayohatlar daftariga belgilab chiqdi.



a) Xaritadagi bir santimetr amalda 20 km ga mos keladi. Aziza amalda necha metr masofani bosib o'tdi?

b) Bu xaritadagi 1 millimetr yo'l amalda qanday masofaga to'g'ri keladi?

d) Jami bosib o'tilgan yo'lning xaritadagi uzunligini toping.

e) Amalda bosib o'tilgan yo'lning uzunligini toping.

6. Toshkentdan Termizga samolyotda 1 h 40 min da, avtomobilda esa 8 h 20 min da yetib borish mumkin. Termizga samolyotda mashinadagidan necha marta tez yetib borsa bo'ladi? Shu bilan qancha vaqtni tejash mumkin?

7. Toshkentdan Buxorogacha n km, Buxorodan Nukusgacha esa m km. Shunday savollar tuzingki, quyidagi ifodalar ularning javobi bo'lsin:

$n + m$ $\qquad$ $n - m$

Agar n = 557 km, m = 547 km bo'lsa, bu qiymatlarni hisoblang.

8. Kataklarga pastdagi sonlarni shunday joylashtiringki, sehrli kvadratlar hosil bo'lsin.

7		
	8	4

6, 11, 5, 12, 10, 9

17		
	18	
	20	

16, 21, 22, 14, 15, 19

9. Nuqtalarning koordinatalarini hisoblang. Ular koordinata nurida qanday tartibda joylashishini aniqlang.

$A((6\,120 - 3\,600) : 6 + 116 \cdot (201 - 192))$

$B(2\,097 - 6 \cdot (306 + 5) + 1\,991)$

$C(2\,582 - (15 \cdot 3 + 20 \cdot 2) : 17)$

10. Yo'lovchi poyezdida 11 o'rinli 2 ta vagon, 26 o'rinli 2 ta vagon va 36 o'rinli 4 ta vagon bor. Bu poyezdga jami necha kishi sig'adi?

Yondosh mavzu:
madaniyat.

To‘g‘ri chiziqlar, kesmalar, nurlar.





1. Bu yozuvlar orasidan to‘g‘ri tengliklarni toping. Bu harflardan qanday so‘z yasash mumkin?

A $27 \cdot 9 = 243$	**K** $35 \cdot 8 = 2\,440$	**P** $13 \cdot 7 = 721$
S $505 + 170 = 675$	**M** $451 + 129 = 470$	**R** $270 : 5 = 54$
I $800 - 124 = 786$	**Q** $920 : 2 = 460$	**K** $199 + 199 = 397$

2. Bu yerdagi yozuvlar orasidan ifoda, tenglik, tengsizlik va tenglamani toping. Noma’lum sonning qiymati qanday bo‘lganda tenglama yoki tengsizlik to‘g‘ri bo‘ladi?

$x + 34$	$17 - n = 9$	$b < 5$	$16 - 9 = 7$
$6 \cdot 5 = 30$	$2 \cdot 5 \cdot 10$	$m : 4 = 48$	$x \cdot y + z$



$x < 7$ tengsizlik “iks yettidan kichik” deb o‘qiladi va $x = 1; 2; 3; 4; 5; 6$ bo‘lganda to‘g‘ri bo‘ladi.

$x \leq 7$ tengsizlik “iks yettidan kichik yoki teng” deb o‘qiladi va $x = 1; 2; 3; 4; 5; 6; 7$ bo‘lganda to‘g‘ri bo‘ladi.

3. Har bir tengsizlik uchun koordinata nurini yasab, unda bu tengsizlikning barcha yechimlarini belgilang.

$b < 6$ $x < 1$ $y \leq 5$

4. Tengsizlik ko'rinishida yozing. Bu tengsizliklarning to'g'riligini tekshirib ko'ring.

a) 56 va 5 sonlari ko'paytmasi 200 dan kichik.
b) 1230 va 1500 sonlari yig'indisi 2000 dan katta.
d) 6700 va 2300 sonlari ayirmasi 4000 dan kichik.
e) 345 va 5 sonlari bo'linmasi 60 dan katta.

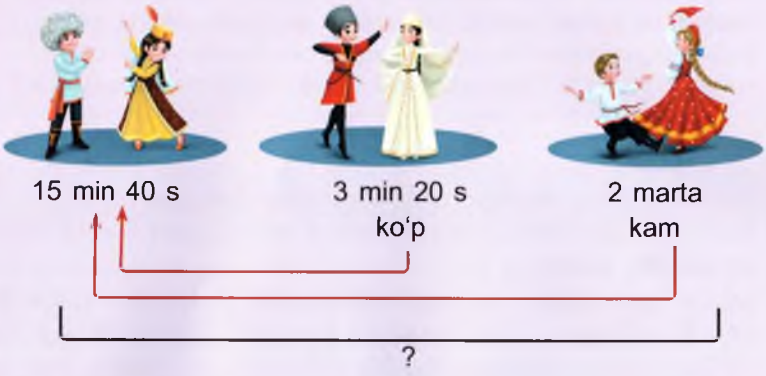
5. Raqs zali bo'yi a, eni b bo'lgan to'g'ri to'rtburchak shakliga ega. Quyidagi ifodalar qanday savollarga javob bo'ladi?

$a \cdot 2 + b \cdot 2$; $a \cdot b$?



Agar $a = 7$ m, $b = 5$ m bo'lsa, bu ifodalarning qiymatini hisoblang.

6. Sxema bo'yicha masala o'ylab toping va uni yeching.



7. 24 ga qoldiqsiz bo'linadigan barcha sonlarni ayting. 36 soni qanday sonlarga qoldiqsiz bo'linadi?

8. Sinfdoshingiz bilan musobaqalashing. Kim bu misollarni birinchi bo'lib, xatosiz yechsa, o'sha g'olib bo'ladi.



235 + 179 + 265	558 + 126 + 142
(187 + 195) – 95	(237 + 167) – 37
689 – (38 + 189)	541 – (26 + 141)
429 – 154 – 129	382 – 195 – 182
25 · 367 · 4	4 · 298 · 25



9. Tengsizlikning o'ng tomonini hisoblang. Koordinata nurida tengsizlik to'g'ri bo'ladigan barcha nuqtalarni belgilang.

$x < 415 \cdot 2 : 10 - 3 \cdot (999 - 826 - 147)$

10. Raqs tanlovining barcha qatnashchilariga 10 dan 99 gacha bo'lgan nomerlar berildi. Qizlarga 2 ga, 5 ga yoki 10 ga bo'linadigan nomerlar tegdi, qolgan barcha nomerlar o'g'il bolalarga berildi. Tanlovda necha nafar qiz bola qatnashgan?

11. Ifodalarni ikkita ustunga: chap tomondagi ustunga barcha to'g'ri tengsizliklarni, o'ng tomondagi ustunga esa barcha to'g'ri tengliklarni yozing.

561 + 119 = 680	982 – 758 = 222	600 – 134 < 450
28 · 29 > 800	6 188 : 4 = 1 547	32 · 87 > 2 700
50 000 : 100 = 500	22 · 22 < 1 000	1 000 – 448 < 500

12. Tikuvchi raqs ansambli uchun ko'ylak tikyapti. 15 ta ko'ylakka 51 metr to'r tikildi. Qolgan 6 ta ko'ylakka yana qancha to'r kerak?

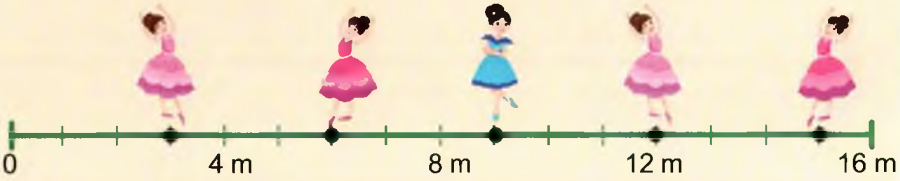
Yondosh mavzu:
balet.

Nur, bo‘linish, masofa.





1. Baletda aniq raqs sur’atini saqlab qolish muhim. Sahnaning kengligi qanday? Hozir har bir raqqosa sahnaning chap chekkasidan qanday masofada turibdi? O‘ng chekkasidan-chi?

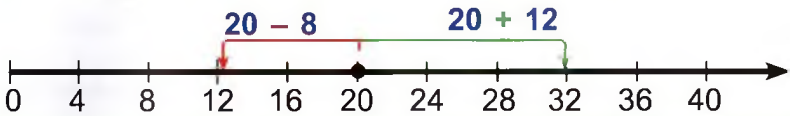


2. Raqqosa raqsning boshlanishida qayerda turibdi? Agar u:
a) o‘ng tomonga 7 m yursa;
b) chap tomonga 3 m ga sakrasa, qaysi nuqtaga borib qoladi?
Uning harakatlarini matematik tilda qanday yozish mumkin?



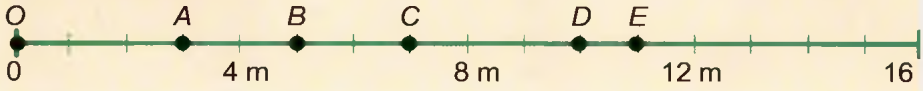


Sonli nur (koordinata nuri)dagi harakat matematik amallar – qo‘shish yoki ayirish bilan ifodalanadi.



3. Sonli nurdan foydalanib, hisoblang:
$5 + 7 - 3 + 4 - 2 + 1 - 3$;
$8 - 5 + 6 + 1 + 1 - 7$.
Ifodalardagi birinchi son nimani bildiradi?
Har bir keyingi son amal belgisi bilan birga nimani bildiradi?

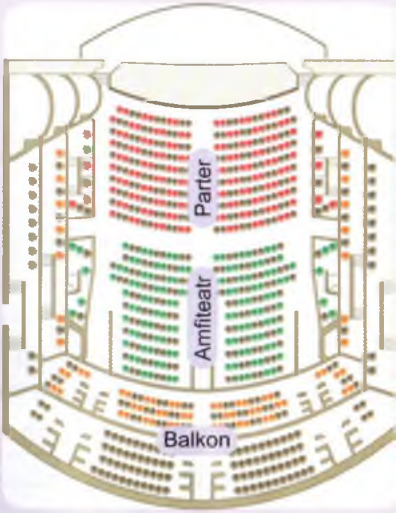
4. Aziza, Salima va Karima balet maktabida o‘qishadi. Aziza O nuqtadan A nuqtaga sakradi, Salima B nuqtadan C nuqtaga sakradi, Karima esa D nuqtadan E nuqtaga sakradi. Kim eng uzoqqa sakragan?



5. Ifodalar tuzing.
Chiptaning narxi zaldagi joyga bog‘liq. Jadvaldan foydalanib, chiptalarning narxini hisoblang.

Parter 1–5-qatorlar	100 000 so‘m
Parter 6–10-qatorlar	80 000 so‘m
Amfiteatr	70 000 so‘m
Balkon 1-qavat	40 000 so‘m
Balkon 2-qavat	30 000 so‘m

a) Parterning 4-qatoriga 4 ta chipta.
b) Amfiteatrga 5 ta chipta.
d) Balkonga 36 ta chipta (qavatini o‘zingiz tanlang).
e) Parterning 5-qatoriga 3 ta chipta, 6-qatoriga 4 ta chipta.



6. “Qarsildoq” baleti ikki qismdan iborat bo‘lib, birinchi qism 55 minut, ikkinchisi esa undan 10 minut qisqaroq davom etadi. Agar spektakl 2 h 15 min davom etsa, tanaffus qancha davom etadi?

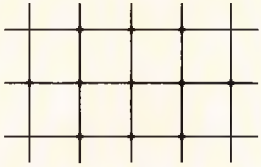
7. Hisoblang. Baletda ushbu holat qanday ataladi?

A	$45 \cdot 32$	**K**	$1\,404 : 9$
B	$19 \cdot 52$	**R**	$4\,496 : 8$
E	$14 \cdot 55$	**S**	$2\,660 : 7$



1 440	562	1 440	988	770	380	156

8. Barcha nuqtalardan yopiq siniq chiziqni shunday o‘tkazingki:
a) barcha nuqtalar birlashsin;
b) chiziq o‘zini o‘zi kesib o‘tmasin;
d) hech bir uchta qo‘shni chiziq bir kesmada yotmasin.



9. Aziza $A(12)$ nuqtaning sonli nurda qaysi tomonga necha qadam siljiganini yozib bordi. Sonli ifoda tuzib, A nuqta sanoq boshidan qancha masofada to‘xtaganini toping.

$A(12)$: $3 \rightarrow$, $5 \leftarrow$, $4 \rightarrow$, $6 \rightarrow$, $7 \leftarrow$, $1 \leftarrow$, $5 \leftarrow$, $4 \rightarrow$, $2 \rightarrow$.

10. Teatrning parterida 258 ta joy bor. Bu amfiteatrdagidan 36 ta ko‘p, balkonlardagidan esa 78 ta ko‘p. Teatrda jami nechta joy bor?

102. Sonli nur yordamida masalalar yechish

Yondosh mavzu:
o‘yinlar.

To‘g‘ri chiziqlar, kesmalar, nurlar.

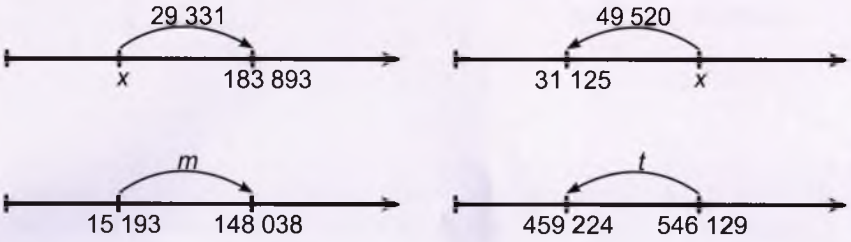




1. Umida sakrog‘ichda sakrayapti. U bir sekundda 2 metrni yugurib o‘tadi. Umida 2 sekundda necha metrni yugurib o‘tadi? 3 sekundda-chi? 5 sekundda-chi? U 22 metrni qancha vaqtda yugurib o‘tadi?



2. Rasmlarga qarab, tenglamalar tuzing. Bu tenglamalarni qanday yechish mumkinligini ayting. Tenglamalardan birini tekshirish bilan yeching.



3. Sonli nur yasang. Uning bir bo‘linishi 2 katak bo‘lsin. Bu o‘qda $A(7)$ nuqtaning harakatini quyidagi algoritm bo‘yicha chizing:

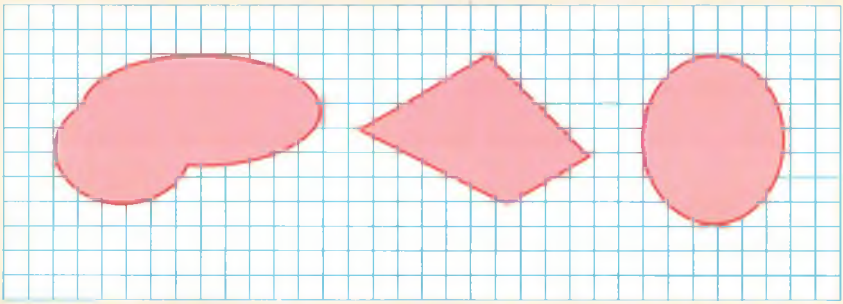
2 →, 1 ←, 3 →, 3 →, 7 ←, 1 ←, 3 ←, 6 →, 1 ←.

Buni sonli ifoda ko‘rinishida yozing.

4. Umida, Madina, Jasur, Akmal va Aziza o'rindiqda o'tirishibdi. Umida Madinadan chap tomonda, Azizadan o'ng tomonda o'tiribdi. Akmal Azizaning ham, Umidaning ham, Jasurning ham yonida emas. Jasur bilan Aziza ham yonma-yon emas. Bu bolalar chapdan hisoblaganda qanday tartibda o'tirishibdi?

5. Ariq bo'yida oltita daraxt – majnuntol, chinor, akatsiya, terak, archa va zarang o'sadi. Agar akatsiya chinordan pastroq, majnuntol archadan balandroq, zarang terakdan pastroq, majnuntol akatsiyadan pastroq, zarang chinordan balandroq bo'lsa, eng baland va eng past bo'yli daraxt qaysi?

6. Chizmadagi har bir katakka amalda $1m^2$ maydon yuzi to'g'ri keladi. Aziza hovlidagi asfaltga bir nechta shakl chizdi. Paletka yordamida bu shakllarning amaldagi yuzini toping.

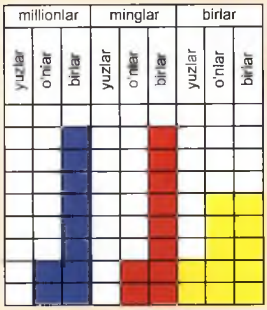


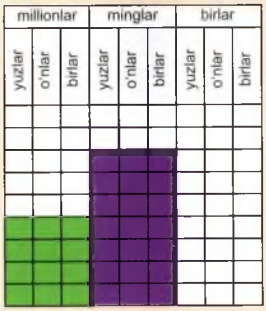
7. Bu sonlarni ular qiymatlarining kamayib borishi tartibida joylashtiring.

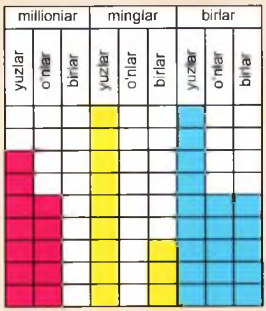
308732 319475 3058285 314740 382004 300999 540039

102. Sonli nur yordamida masalalar yechish

8. Bu yerda qanday sonlar yozilgan? Ularni o‘sib borish tartibida yozing.







9. Aziza dugonalariga matematik boshqotirma aytyapti. U 8391276540 sonini yozib, shunday dedi: “Oldin bu sondan shunday 5 ta raqamni o‘chiringki, iloji boricha eng katta son hosil bo‘lsin. Keyin esa shunday 5 ta raqamni o‘chiringki, iloji boricha eng kichik son hosil bo‘lsin”.
Bu sonlar ayirmasini toping.

10. Hisoblang. Har bir ustundagi misollarda qanday umumiylikni ko‘rish mumkin?

825 + 184 + 175	900 – 134 – 266	(634 + 278) – 178
414 + 271 + 186	745 – (139 + 145)	(255 + 286) – 155
233 + 129 + 367	528 – (195 – 228)	(341 + 299) – 141

11. Masalani to‘g‘ri chiziq yordamida yeching.
Hayvonlarni taroziga tortishgan edi, jirafa tuyadan og‘irroq, tuya yo‘lbarsdan og‘irroq, qoplon esa yo‘lbarsdan yengilroq chiqdi.
Bu hayvonlarning nomlarini ular vaznining ortib borishi tartibida yozing.

Yondosh mavzu:
opera.

Tenglik, tenglama,
noma'lum.





1. Tengliklar to'g'ri bo'lishi uchun katakchalarda qaysi sonlar turishi kerak?

533 · □ = 533	273 + □ = 273	396 : □ = 396
□ · 1 = 408	□ + 0 = 146	□ : 1 = 928
6 · □ = 0	□ – 0 = 540	□ · 347 = 0

2. Noma'lum komponentlar qanday topilishini eslang. Tenglamalarning ildizini, ya'ni tenglamalarni to'g'ri tenglikka aylantiradigan sonlarni toping. Javoblaringizni og'zaki tekshirib ko'ring.

$x + 200 = 800$	$650 - y = 250$	$z - 270 = 230$
$n \cdot 3 = 27$	$m : 5 = 7$	$40 : t = 5$



Sodda tenglama – bu chap tomonida bitta amal turgan tenglama.

$x + 45 = 90$ $y \cdot 3 = 93$

3. Tenglamalarni tekshirishlar bilan yeching.

$x + 23\,449 = 62\,383$ $n \cdot 12 = 144$ $64\,000 : t = 80$

4. Masalalarga doir tenglamalar tuzing.

a) Spektaklda 74 nafar – 36 nafar erkak va x nafar ayol qo'shiqchi qatnashdi. Spektaklda necha nafar ayol qo'shiqchi ishtirok etgan?

b) Ikki qismli spektakl 2 h 10 min davom etadi. Birinchi qism n minut, ikkinchisi 55 minut davom etgan bo'lsa, birinchi qism necha minut davom etgan?

5. “Bo‘ri va yetti uloqcha” operasi uchun parterga 18 ta chipta, amfiteatrga esa 38 ta chipta sotildi. Parterda 45 ta o‘rinli 10 ta qator, amfiteatrda esa 22 ta o‘rinli 11 ta qator bor bo‘lsa, yana nechta bo‘sh o‘rin qolgan?

6. Amallar tartibiga rioya qilgan holda hisoblang. Italyan tilida ish, mehnat, insho, asar ma’nosini bildiruvchi so‘zni toping.

$2\,825 : 5 - 3 \cdot (64\,069 - 63\,925) + 2\,741$

A 2 874	**I** 3 056	**O** 144	**P** 565
E 432	**L** 290	**N** 146	**R** 133

7. Qoldiqli bo‘lishlarni bajaring. Bu yerda qaysi ifoda ortiqcha? Nima uchun?

$567 : 6$ $\quad 13\,829 : 3$ $\quad 279 : 3 \cdot 260 : 3$

8. Ushu $144 : 16 - 4 \cdot 3$ ifodada qavslar turlicha qo‘yilsa, necha xil javob chiqishi mumkin?

9. Hisoblang va javoblarni o‘sish tartibida joylashtiring. Operaning mazmunini qisqacha aytib berish qanday ataladi?

ET	$12\,831 - 1\,148 \cdot 5$	**TO**	$9\,967 - (15 \cdot 3 + 64 : 16)$
LI	$672 + 12 \cdot (7 + 29)$	**BR**	$3\,345 + (819 - 720) : 11$

10. Opera spektaklida ayollar uchun 198 ta ko‘ylak tikildi. Bu erkaklar uchun tikilgan ko‘ylaklardan ikki marta ko‘p. Bu spektakl uchun jami nechta ko‘ylak tikilgan?

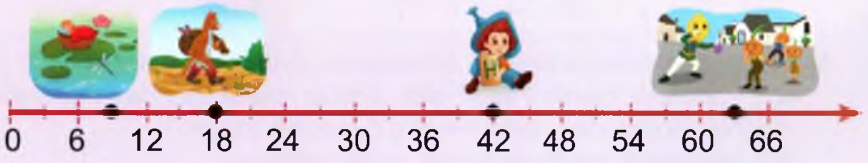
Yondosh mavzu:
adabiyot.

Nur, koordinata,
tengsizlik.





1. Sonli nurda tasvirlangan obyektlarning koordinatalarini toping.

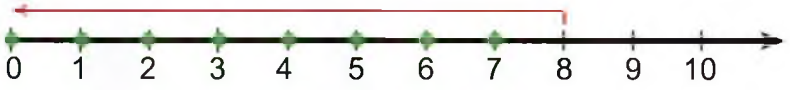


2. Bu qaysi ertak qahramoni ekanini toping. Uning:

a) yoshi 1 000 dan oshgan;
b) bo'yi 10 santimetrdan past;
d) vazni bir tonnadan ko'p;
e) hajmi bir litrdan kam.

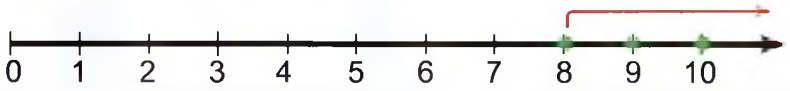
Tengsizlikning barcha yechimlarini ko'rish uchun ular sonli nur (koordinata nuri)da belgilab chiqiladi.

***x* < 8** ***x* soni 8 dan kichik.**





***y* ≥ 8** ***y* soni 8 ga teng yoki undan katta.**



104. Tengsizliklarni sonli nur yordamida yechish

3. Tengsizliklarning yechimlarini sonli nurda ko‘rsating:
$x < 5$ $y > 4$ $z < 1$

4. Bir soatda Madina kitobdan 6 bet, Akmal esa Madinadan kamroq bet o‘qidi. Akmal necha bet o‘qigan bo‘lishi mumkin? Javobni tengsizlik shaklida yozing. Mumkin bo‘lgan barcha yechimlarni yozing.

5. O‘qituvchi darsda bolalarga ertaklardan qiymatlarni solishtirishga doir masalalar topishni taklif qildi. Bolalar mana shunday masalalar topishdi: Bolalardan qaysi biri to‘g‘ri masala topgan?
Shu masalaga doir ifoda tuzing va uni yeching.

Madina: “Yalmog‘iz kampir 1680 yoshda, O‘lmas Koshey esa undan 1360 yosh katta. Koshey necha yoshda?”

Jasur: “Uchta tarvuzning ichida 780 ta tilla tanga bor. Beshta shunday tarvuzning ichida nechta tilla tanga bo‘ladi?”

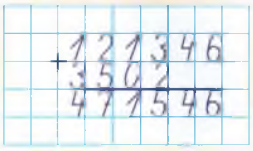
Aziza: “Quyoshli shaharchada 2789 ta pakana yashaydi, Gullar shahrida esa 1354 ta kichkintoy yashaydi. Kichkintoylar pakanalardan nechta kam?”

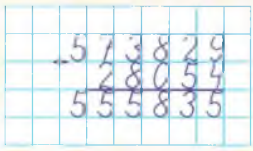
6. O‘z jamoangiz bilan birorta ertakdan shunday masala topingki, uni yechish uchun ikkita amal bajarish kerak bo‘lsin. Sinf bo‘yicha eng yaxshi masalani tanlang va uni yeching.

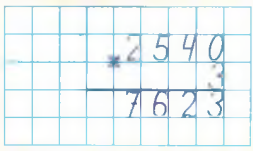
7. Bobur bir oyda 5 ta kitob o‘qiydi. Hozir u 10 yoshda bo‘lsa, 18 yoshga kirguncha nechta kitobni o‘qib tugatadi?

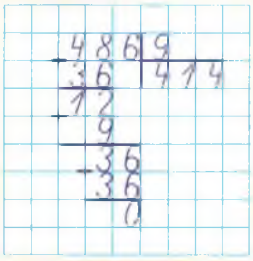


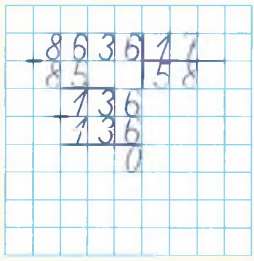
8. Misollarni yechishdagi xatolarni toping. Ularni to‘g‘ri yeching.











9. Pinokkio – Italiya ertaklaridagi yog‘och bolaning ismi. Pinokkio yolg‘on gapirsa, uning burni uzayib ketaveradi. Uning bo‘yi 1 m 4 dm, burnining uzunligi esa dastlab 9 cm bo‘lgan. U har safar yolg‘on gapirganida, burni ikki marta uzayib ketavergan. Pinokkioning burni bo‘yidan ham katta bo‘lib ketgandan keyin, u qo‘rqib ketib, yolg‘on gapirmay qo‘ydi. Pinokkio necha marta yolg‘on gapirgan?

10. Tengsizliklarning o‘ng tomonini hisoblang va yechimlarini sonli nurda ko‘rsating.

$x < 326\,714 - 250 \cdot 300 - 251\,709$

$y \leq (38\,056 + 5\,808) : 4 - (907 + 189) \cdot 10$

11. Bahodir yigit ilonlar bilan uch kecha jang qilibdi. Birinchi kecha u to‘qqiz boshli ilon bilan jang qilibdi. Bahodir yigit uning hamma boshini qilich bilan kesib tashlabdi. Ikkinchi kecha kelgan ilonning boshlari oldingisinikidan ikki marta ko‘p ekan. Bahodir yigit uning boshlarini ham kesib tashlabdi. Uchinchi kuni kelgan ilonning boshlari esa oldingi ikkita ilonning boshlari nechta bo‘lsa, shuncha ekan. Bahodir yigit shu uch kechada ilonlarning jami nechta boshini kesib tashlagan?

105. Koordinata burchagi

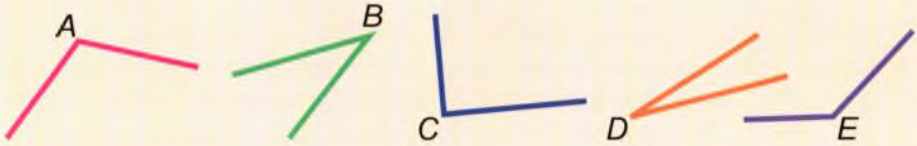
Yondosh mavzu:
xaritalar.

Koordinatalar.

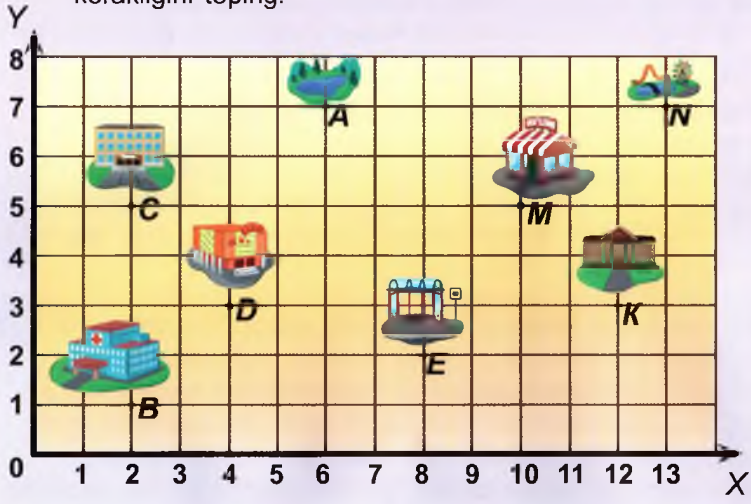




1. Burchak o'lchagich yordamida o'tkir, o'tmas va to'g'ri burchaklarni toping.

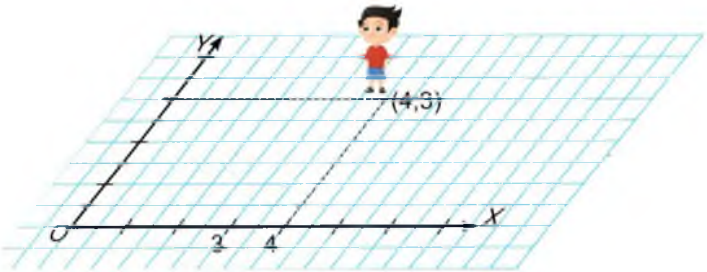


2. Xaritadagi har bir obyektning o'rnini aniqlang.
Obyektga yetib borish uchun dastlab gorizontal yo'nalishda necha qadam, keyin esa vertikal yo'nalishda necha qadam yurish kerakligini toping.



	(X; Y)
A	(7; 4)
B	
C	
D	
E	
K	
M	
N	

Obyektning tekislikda turgan joyini aniq bilish uchun tekislikda ikkita koordinata nuridan iborat koordinata burchagi chiziladi. Ulardan biri gorizontal, ikkinchisi vertikal yo‘nalishni ko‘rsatib turadi.

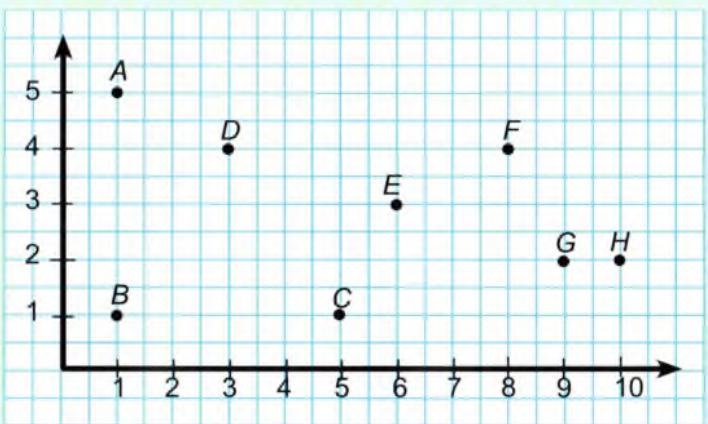




Obyektning turgan joyi ikkita son bilan yoziladi: oldin gorizontal *OX* o‘qi bo‘yicha qadamlar soni, keyin vertikal *OY* o‘qi bo‘yicha qadamlar soni ko‘rsatiladi.
Bu sonlar juftligi nuqtaning koordinata burchagidagi koordinatalari deb ataladi.



3. Daftaringizga usbu nuqtalarning koordinatalarini yozing.



4. Xaritadagi bir millimetr real dunyodagi 300 m ga to'g'ri keladi. 2-topshiriqdagi istalgan ikki obyekt orasidagi masofani o'lchab, ular orasidagi real masofani bilib oling.

5. Sodda tenglamalar tuzing va ularni tekshirishlar bilan yeching. Tenglamaning ildizini bilib olgach, savolga javob bering.

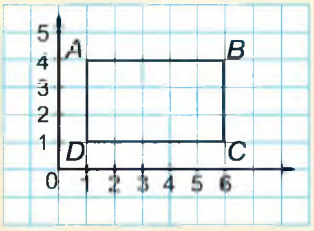
a) Ikki sonning ko'paytmasi 360 ga teng. Agar ulardan biri 90 ga teng bo'lsa, bu ikki sonning ayirmasi nimaga teng?

b) Ikki sonning bo'linmasi 600 ga teng. Agar ulardan biri 30 bo'lsa, bu ikki sonning yig'indisi nimaga teng?

6. Yuzi 12 cm^2, perimetri esa 26 cm bo'lgan to'g'ri to'rtburchak chizing.

7. Masalani tenglama yordamida yeching. Xaritada x ta shahar va 48 ta qishloq, jami 60 ta aholi punkti belgilangan. Xaritada nechta shahar belgilangan?

8. Bu chizmani daftaringizga ko'chirib chizing. *ABCD* to'g'ri to'rtburchak uchlari koordinatalarini toping. To'g'ri to'rtburchakning ichida istalgan *M* va *K* nuqtalarni belgilab, ularning koordinatalarini toping. *ABCD* to'g'ri to'rtburchakning yuzini toping.



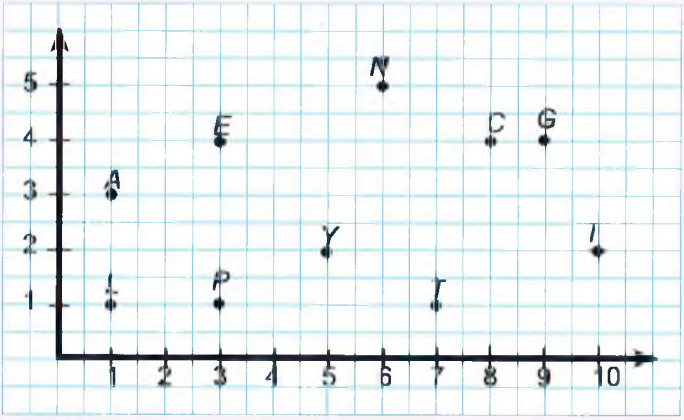
Yondosh mavzu:
stol o'yinlari.

Koordinata burchagi,
koordinata, nuqta.





1. Harflarni ko'rsatilgan tartibda yig'ing. Qanday so'z hosil bo'ldi?



(3; 1)	(1; 1)	(1; 3)	(5; 2)	(10;2)	(6; 5)	(9; 4)

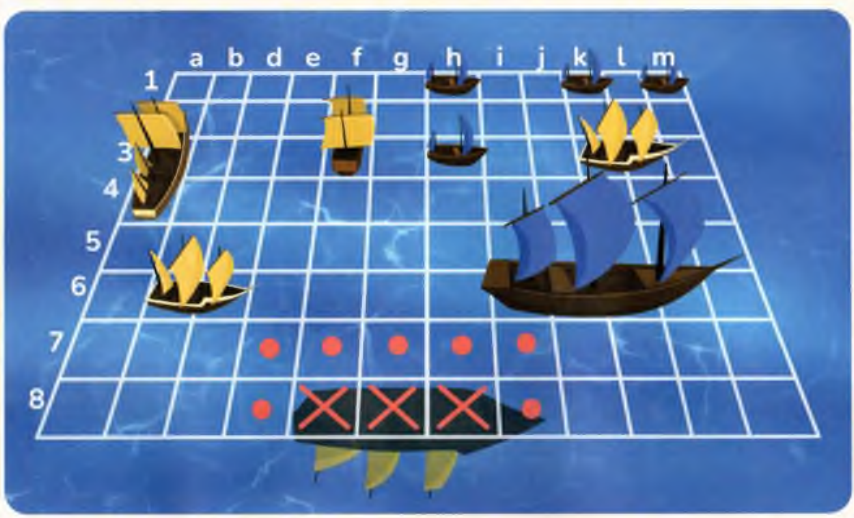
2. Daftaringizga koordinata burchagini chizing. Bir bo'linish 2 ta katakka teng bo'lsin. Bu burchak ichida quyidagi nuqtalarni ketma-ket tutashtiring:
(3;2) → (1;4) → (3;6) → (8;4) → (9;6) → (9;2) → (8;4) → (3;2) → (4;4) → (3;6).
Nima hosil bo'ldi? Bu obyektni oxirigacha chizing.

3. Ushbu (0;0), (3;0), (4;0), (7;0) nuqtalarda qanday umumiylik bor? Ular qayerda joylashgan?
Ushbu (0;0), (0;2), (0;3), (0;6) nuqtalarda qanday umumiylik bor? Ular qayerda joylashgan?

4. “Suratlarni shifrlovchi – suratlar shifrini yechuvchi” loyihasi. Katak daftaringizdan ikkita varaq oling. Birinchi varaqqa koordinata burchagini chizing. Bir bo‘linishni bitta katak deb oling. Varaqqa gul, toj, maysa, daraxt, tog‘ kabilarning oddiy suratini chizing. Ularning atrofini siniq chiziq bilan o‘rash mumkin bo‘lsin. Endi suratni shifrlang – ikkinchi varaqda bu siniq chiziqlarning barcha uchlari koordinatalarini yozib chiqing (suratlar va ularning shifrlarini oldindan, uyda tayyorlab kelsangiz ham bo‘ladi). Shifrni qo‘shni jamoaga bering, lekin suratni ularga ko‘rsatmang. Suratni qaysi jamoa birinchi bo‘lib topdi? Narigi jamoa sizga bergan shifr aniq ekanmi? Buni o‘yin oxirida baholang. Suratning shifrini kim birinchi bo‘lib yechdi?

5. Radist 5 min 40 s ichida 340 ta harfli matnni shifrlab uzatdi. U 1350 ta harfli matnni qancha vaqtda shifrlay oladi? Bu vaqtni minut va sekundlarda yozing.

6. Bu kemalarning koordinatalarini yozing.



Yondosh mavzu:
dizayn.

Koordinata burchagi,
koordinata, nuqta.





1. Bu yerda qanday shakllarni simmetrik deyish mumkin? Nima uchun?







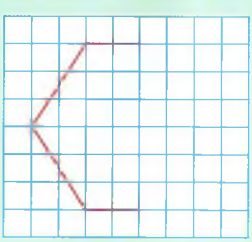


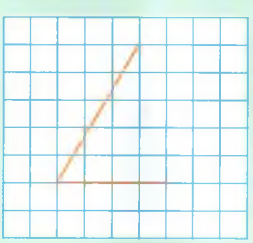


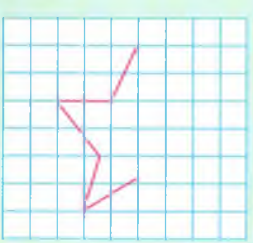
Shaklning yarmi biror o‘qqa nisbatan uning ikkinchi yarmi bilan to‘liq ustma-ust tushsa, bunday shakl simmetrik shakl deb ataladi.
Bu o‘q esa simmetriya o‘qi deb ataladi.



2. Bu shakllarni daftaringizga ko‘chirib chizing. Ularning qolgan yarmini shunday chizingki, bu shakllar simmetrik bo‘lsin.







3. Daftaringizda ushbu shakllarni yasang. Ularda mumkin bo‘lgan barcha simmetriya o‘qlarini o‘tkazing. Bu shakllarning har birida nechtadan simmetriya o‘qi bor?



4. Simmetriya o‘qi bor barcha harf va sonlarni eslang va daftaringizga yozing.

5. Hisoblang. Bu misollarning qaysilarini simmetrik deyish mumkin?

380 · 830	538 880 : 40	925 · 63 + 63 · 925
308 · 803	575 757 : 57	437 900 – 252 819 : 9

6. Simmetrik vitraj yasash uchun 256 bo‘lak qizil shisha, 126 bo‘lak yashil shisha, yashil shishadan 3 marta ko‘p ko‘k shisha va yashil shishadan 6 marta ko‘p oq shisha tayyorlandi. Vitraj uchun jami necha bo‘lak shisha kerak bo‘ladi?

7. Shaklning bo‘yalgan qismi yuzini toping.

a)



b)

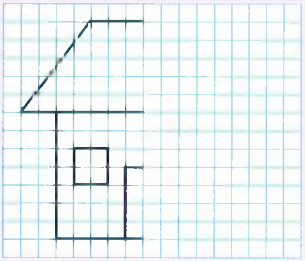


8. Masala tuzing va uni yeching.

	Narxi	Miqdori	Qiymati
	1 630 000 so‘m	1	3 090 000 so‘m
	?	4	

9. 2 023 sonini chapdan o‘ngga ham, o‘ngdan chapga ham bir xil o‘qiladigan ikki simmetrik sonlar yig‘indisi ko‘rinishida yozing.

10. Daftaringizda uyning yarmini chizing. Uning o‘ng yarmini simmetrik ravishda chizing.



11. Hisoblang. Chapdan o‘ngga ham, o‘ngdan chapga ham bir xil o‘qiladigan so‘zlar, jumlalar va sonlar nima deb ataladi?
Masalan: 16761, qiziq, “tut aro qora tut”.

A	22 · 17	**L**	5 696 : 8	**O**	378 : 14
D	56 · 31	**M**	1 057 : 7	**P**	1 216 : 16
I	27 · 44	**N**	912 : 4	**R**	1 350 : 45

76	374	712	1 188	228	1 736	30	27	151

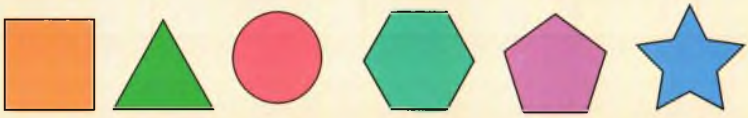
Yondosh mavzu:
grafika.

To‘g‘ri chiziqlar,
kesmalar, nurlar.

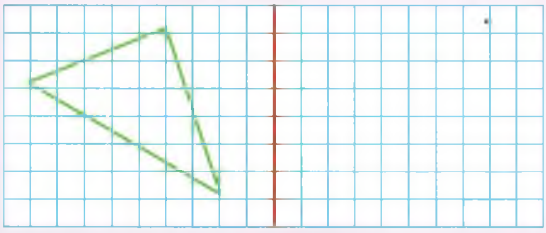




1. Bu shakllardan qaysi birida simmetriya o‘qi eng ko‘p?



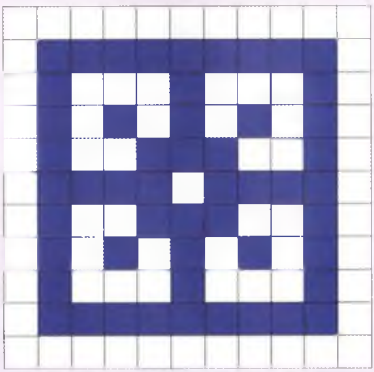
2. Uchburchak yasang. Uni qizil chiziqqa nisbatan simmetrik akslantiring. Burchak o‘lchagich bilan uning burchaklarini aniqlang.

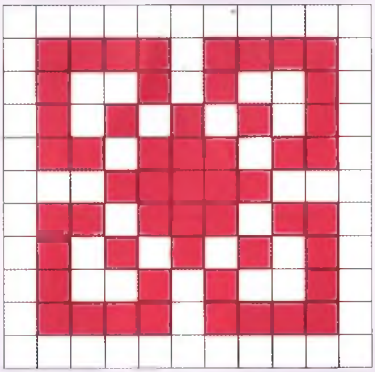


3. Daftaringizda $AB = 5$ cm kesma yasang. Markazi A nuqtada bo‘lgan 3 cm radiusli aylana yasang. Markazi B nuqtada bo‘lgan xuddi shunday radiusli aylana yasang. Bu aylanalar kesishadimi? Ularning umumiy sohalarini bo‘yang. Simmetrik shakl hosil bo‘ldimi?

4. To‘g‘ri to‘rtburchakning yuzi 36 cm^2. Uning perimetri qanday bo‘lishi mumkin? Har bir perimetr uchun ifoda yozing va ularning qiymatini hisoblang.

5. Daftaringizga shu shakllardan ixtiyoriy birini kataklar bo'yicha ko'chirib chizing. Bo'yalgan qismning yuzi kataklarda qanday?





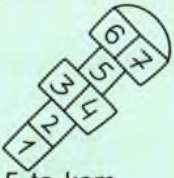
6. Qisqa yozuv bo'yicha masala tuzing va uni yeching.



9



3 marta ko'p



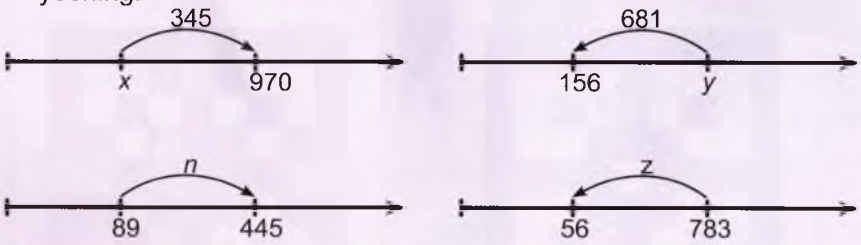
5 ta kam

?

7. Rasmda parallel va perpendikular chiziqlarni toping.

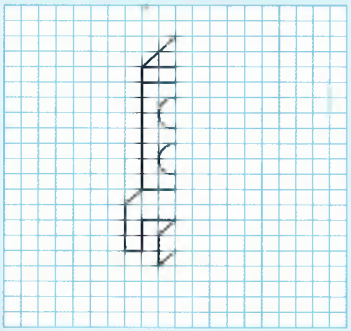


8. Rasmlar bo'yicha tenglamalar tuzing. Bu tenglamalarni qanday yechish mumkinligini ayting. Tenglamalardan birini tekshirish bilan yeching.



9. Akmal raqamlari yig'indisi bir xil bo'lgan ikkita uch xonali son tanladi. U katta sondan kichik sonni ayirdi. Akmalda eng katta ayirma qanday bo'lishi mumkin?

10. Bu rasmning chap yarmini daftaringizga ko'chirib chizing. Uning o'ng tomonini shunday chizingki, simmetrik shakl hosil bo'lsin.



11. Ifodalar yozing va ularning qiymatini hisoblang.

a) 56 872 va 45 291 sonlari yig'indisidan 13 993 sonini ayiring.
b) 67 900 va 12 387 sonlari ayirmasiga 12 344 sonini qo'shing.
d) 35 va 678 sonlari ko'paytmasini 14 soniga bo'ling.
e) 3 500 va 50 sonlari bo'linmasini 46 soniga ko'paytiring.

Yondosh mavzu:
rassomlar.

Koordinata burchagi,
koordinata, nuqta.





1. Amallarni bajaring va bir xil qiymatli ifodalarni tanlab oling. Ushbu suratlar mualliflarini toping.



Yulduzli tun
$34 \cdot 56 + 271$

Ivan Shishkin
3 768



Qarag'ayzor
$5\,000 - 56 \cdot 22$

Leonardo da Vinchi
6 672



Mona Liza
$40\,200 : 6 - 28$

Vinsent Van Gog
2 175

2. Tenglamalarni soddalashtiring va ularni tekshirmasdan yeching.

$x + 18 = 23 \cdot 2 - 22$ $\qquad$ $y - 23 = 45 \cdot 8 - 200$



O'ng yoki chap tomonida bir nechta amal ishtirok etgan tenglama tarkibli tenglama deb ataladi.
Misol: $2 \cdot (x - 4) = 28$
$50 - x : 4 = 400 : 80$

Agar tenglamaning chap yoki o'ng tomonida sonli ifoda turgan bo'lsa, ularni hisoblash kerak.

Chap tomonda bir nechta amal turgan bo'lsa:

1) noma'lum o'rnida son turibdi, deb tasavvur qiling;
2) chap tomondagi amallar tartibini ko'rsating;
3) oxirgi amaldan qutulish bilan tenglamani yeching.

Misol:



$\underline{8\,000} \overset{2}{-} \underline{x \overset{1}{\cdot} 15} = 2\,990$ **Avval oxirgi – ikkinchi**
$x \cdot 15 = 8\,000 - 2\,990$ **amaldan qutulamiz.**
$\underline{x} \cdot \underline{15} = 5\,010$
$x = 5\,010 : 15$
$x = 34$

3. Amallar tartibini aniqlang va oxirgi amalning qaysiligini ayting.

$a : 14 - 45$ $\quad 36 \cdot d + 18 \cdot 4$ $\quad (m - 12) + 3 \cdot 6$

4. Tenglamalarni tekshirishlar bilan yeching.

$(y - 8) \cdot 4 = 72$ $\quad (24 + m) : 9 = 15$
$3 \cdot x + 16 = 61$ $\quad k : 5 + 8 = 12$

5. Tenglamalar yozing.

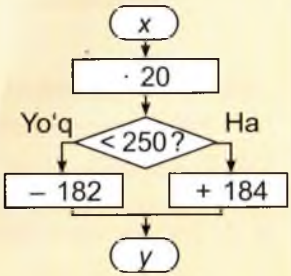
a) Agar x va 178 sonlarini 8 ga ko'paytirsak, 2808 soni hosil bo'ladi.

b) Agar 650 va y sonlari bo'linmasiga 438 sonini qo'shsak, 488 soni hosil bo'ladi.

6. Aziza bir sonni o'yladi. Unga 1980 sonini qo'shdi. Chiqqan natijani 4 ga bo'lgan edi, 566 soni hosil bo'ldi. U qanday sonni o'ylagan?

7. Amallarni sxema bo'yicha bajaring. Rassomning familiyasini toping.

x	0	3	5	10	12	14
y						
	B	**V**	**E**	**K**	**N**	**O**



y	184	284	424	384	98	244

8. Qulay usulda hisoblang.

$85 + 85 + 85 + 85 + 85 + 85 + 85 + 85 + 85 + 85$

$118 + 38\,895 + 1\,105 + 2\,882$

$2 \cdot (2\,994 \cdot 5) \cdot 4 \cdot 25$

$2\,889 \cdot 25 + 2\,889 \cdot 75$

9. Qutida 7 ta qizil, 5 ta ko'k rangli bo'yoq idishi bor. Birdaniga 3 ta qizil bo'yoq idishi chiqishi uchun, qaramay qutidan nechta idishni olish kerak?

10. Tenglamalarni tekshirishlar bilan yeching.

$(x + 277) : 3 = 114$ $\qquad$ $720 : (x - 67) = 80$

11. Rassom suratni dekabr va yanvar oylarida chizdi. U dekabr oyida har kuni 4 h 30 min ishladi, yanvarda esa bundan 1 h 40 min ko'p vaqt ishladi. U suratni chizib tugatish uchun jami qancha vaqt sarfladi? Bu necha kun, necha soat va necha minut bo'ladi?

110. Tenglamalarni soddalashtirish

Yondosh mavzu:
musobaqa.

Tenglamalar,
tarkibli tenglamalar.





1. Tenglamalarning ildizini toping.

242 · □ = 484	145 + □ = 245	400 : □ = 200
□ · 3 = 369	□ + 10 = 172	□ : 3 = 100
554 · □ = 0	□ – 0 = 516	□ · 1 = 0

2. Tenglamalarni soddalashtiring va ularni tekshirishlar bilan yeching.

$x \cdot 3 = 36 \cdot 224 + 73\,560$ $\qquad$ $560 : y = 27 \cdot 199 - 5\,293$

3. O'zingizga yoqqan tenglamalardan tuzilgan zanjirni tanlang. Zanjir bo'yicha barcha tenglamalarni yeching. Kim birinchi bo'lib yechdi?

$x + 56 = 667$	$937 - x = 238$
$y : (12 \cdot 4) = 5$	$y : (55 \cdot 7) = 6$
$z + (320 : 16) = 837$	$z - (408 : 4) = 113$
$3 \cdot t + 168 = 402$	$286 + 3 \cdot t = 742$
$(8 \cdot b - 88) : 2 = 24$	$35 : (18 - b : 8) = 5$

4. Masalaga doir tenglama tuzing va uni yeching.

x sonini 71 ga ko'paytirib, ko'paytmaga 46 ni qo'shdik, yig'indini 6 ga bo'lgan edik, 55 soni hosil bo'ldi. x sonini toping.

Biz nimalarni bilib oldik?
Biz nimalarni o‘rgandik?

Biz parallel va perpendikulyar to‘g‘ri chiziqlar bilan tanishdik.

1. Ikkita gorizontal parallel to‘g‘ri chiziq yasang. Ularga perpendikulyar ikkita to‘g‘ri chiziq yasang. Qanday shakl hosil bo‘ldi? Uning tomonlarini millimetrlarda o‘lchang. Bu shaklning perimetri va yuzini toping.

Biz koordinata nuri bilan tanishdik.

2. Sonli nurda ushbu obyektlarning koordinatalarini toping.



3. Qaysi nuqta chaproqda turadi?
$A(224)$ yoki $B(374)$;
$C(300\,058)$ yoki $D(300\,056)$?

Biz koordinata burchagi bilan tanishdik.

4. Daftaringizda koordinata burchagini yasang. Bitta katakni bitta bo‘linish deb oling. Koordinata burchagida quyidagi nuqtalarni ketma-ket belgilang. Nima hosil bo‘ldi?

$(5;2) \to (5;3) \to (6;4) \to (6;8) \to (7;10) \to (7;12) \to (5;12) \to (5;14) \to (7;16) \to (9;16) \to (10;17) \to (10;16) \to (11;12) \to (19;12) \to (21;9) \to (22;4) \to (21;4) \to (20;8) \to (19;8) \to (19;4) \to (18;2) \to (16;2) \to (16;3) \to (17;4) \to (17;7) \to (9;7) \to (7;2) \to (5;2).$

Biz sodda va tarkibli tenglamalarni yecha olamiz.

5. Tenglamalarni yeching.

$t \cdot 80 = 50\,786 - 45\,986$

$42 - 16 : m = 40$

$(900 - x : 6) \cdot 12 = 8\,400$

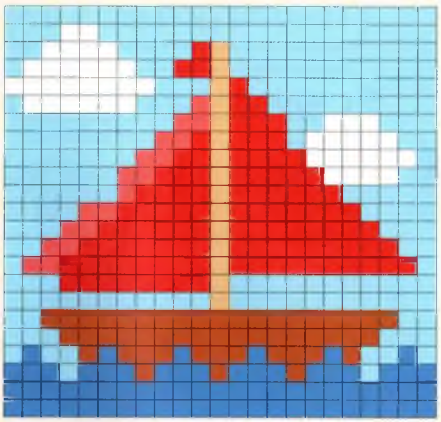
6. Masalaga doir tenglama tuzing va uni yeching.
Daftar x so'm turadi. Onam 15 ta daftar va penalni 16 000 so'mga sotib oldi. Barcha xarid unga 53 500 so'mga tushdi. Bitta daftar necha so'm turadi?

Biz simmetrik obyektlarni ko'ra olamiz.

7. Daftaringizga simmetriya o'qlariga ega bo'lgan harflarni yozing. Har bir harfning tagiga uning nechta simmetriya o'qi borligini yozing.

A B T Y U O I H X M

8. Rasmni daftaringizga ko'chirib chizing. Uni bo'yashdan oldin ishchi sohani ajratib oling: tomoni 23 ta katakdan iborat kvadrat chizing.



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Darslik holati haqida ma'lumot

№	O'quvchining F. I. Sh	O'quv yili	Darslik olingan vaqtdagi holati	Sinf rahbarining imzosi	Darslik qaytarib berilgan vaqtdagi holati	Sinf rahbarining imzosi
1						
2						
3						
4						
5						
6						

Darslikni olish va o'quv yili oxirida uni qaytarishda yuqoridagi jadval sinf rahbari tomonidan quyidagi mezonlarga muvofiq to'ldiriladi

Yangi	Darslikning holati a'lo darajada
Yaxshi	Muqovasi butun, kitobning asosiy qismidan uzilmagan. Barcha sahifalar mavjud, butun, yirtilmagan, yelimi ko'chmagan
Qoniqarli	Muqovasi ezilgan, shikastlangan, kitobning asosiy qismidan qisman ajralgan va foydalanuvchi tomonidan tiklangan. Qayta tiklash ishlari qoniqarli. Yirtilgan sahifalar yopishtirilgan, ba'zi sahifalari yirtilgan
Qoniqarsiz	Muqovasiga chizilgan, kitobning asosiy qismidan to'liq yoki qisman yirtilib, uzilgan, qoniqarli tiklangan. Sahifalari yirtilgan, ba'zi sahifalari yo'q, bo'yalgan, ifloslangan, tiklash mumkin emas

Repyova Irina Vladimirovna

Matematika
3-sinf
III qism

Umumiy o'rta ta'lim maktablari uchun darslik

"Novda Edutainment"
Toshkent – 2023

Muharrir	*N.Gaipov*
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Nashriyot litsenziyasi AI №158. 07.10.2023-yilda original-maketdan bosishga ruxsat etildi. Bichimi 60x84 1/8. Kegli 14 n/shponli. "Arial" garniturasi. Ofset bosma usulida bosildi. Mashinada yengil bo'rlangan (Machine Finished Coated) 80 g/m^2 qog'oz. Shartli b.t. 16,5. Hisob-nashriyot t. 2,66. Adadi 626 983 nusxa. Buyurtma raqami 23-613. "O'zbekiston" NMIUda chop etildi.