

2019-yil

2018 - 2019 – O'QUV YILIDA O'RTA TA'LIM
MAKTABLARINING

5 - SINIF O'QUVCHILARI UCHUN MATEMATIKA
FANIDAN MUSTAQIL SHUG'ULLANISH UCHUN

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MATEMATIKA

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MATEMATIKA 5

Topshiriq 1

Variant 1

1. 1. 99989 dan katta, 6 raqami bilan tugaydigan besh xonali sonni yozing .

Javob: 99996

2. Ifodaning qiymatini toping:

$$\text{A) } 9\frac{13}{19} + \left(8\frac{13}{19} - 3\frac{15}{19}\right) = 9\frac{13}{19} + \left(8\frac{13}{19} - 3\frac{15}{19} = \frac{165}{19} - \frac{72}{19} = \frac{165-72}{19} = \frac{93}{19} = 4\frac{17}{19}\right) = 9\frac{13}{19} + 4\frac{17}{19} = \frac{184}{19} + \frac{93}{19} = \frac{277}{19} = 14\frac{11}{19}$$

$$\text{B) } 10\frac{4}{21} - \left(4\frac{10}{21} + 3\frac{19}{21}\right) = \frac{214}{21} - \left((4+3) + \left(\frac{10}{21} + \frac{19}{21}\right)\right) = \frac{214}{21} - \left(7 + \frac{29}{21}\right) = \frac{214}{21} - \left(7 + 1 + \frac{8}{21}\right) = \frac{214}{21} - \left(8 + \frac{8}{21}\right) = \frac{214}{21} - \frac{176}{21} = \frac{38}{21}$$

3. O'z tezligi 15 km/ soat bo'lgan kater 2 soat daryo oqimi bo'yicha va 3 soat daryo oqimiga qarshi suzdi. Agar daryo oqimining tezligi 2 km/soat bo'lsa, kater shu vaqt oralig'ida qancha masofada bosib o'tgan. $v_k=15$

$$t_1=2$$

$$t_2=3$$

$$v_t=2$$

$$S = ?$$

$$v = \frac{S}{t}$$

$$S = v * t$$

$$S_1 = (v_k + v_t) * t_1$$

$$S_2 = (v_k - v_t) * t_2$$

$$S_1 = (15 + 2) * 2 = 34\text{KM}$$

$$S_2 = (15 - 2) * 2 = 39\text{KM}$$

$$S = S_1 + S_2$$

$$S = 34 + 39 = 73$$

4. Tenglamani yeching:

$$4,2 \cdot (0,25+x) = 1,47.$$

$$4,2(0,25+x) \div 4,2 = 1,47 \div 4,2$$

$$0,25+x = 1,47 \div 4,2$$

$$0,25+x = 0,35$$

$$x = 0,35 - 0,25$$

$$x = 0,1 \quad x = \frac{1}{10}$$

5. To'gri to'rtburchak shaklida bo'lgan bog' maydonining yuzasi 6 ar. Bog' kengligi 20 m. Bog'ning uzunligi nimaga teng ?

$$1 \text{ ap}=10 \times 10 \text{ m}^2=100 \text{ m}^2$$

$$6 \text{ ap}=600 \text{ m}^2$$

$$S=a \cdot b, S=600 \text{ m}^2, b=20 \text{ m}, a=? \text{ m}$$

$$a=S:b$$

$$a=600 \text{ m}^2:20 \text{ m}=30 \text{ m}$$

$$a=30 \text{ m}$$

Variant 2

1. 99988 dan katta, 7 raqami bilan tugaydigan besh xonali sonni yozing
Javob: 99997

$$2.a) 8\frac{7}{9} + \left(7\frac{5}{9} - 4\frac{4}{9}\right) = \frac{79}{9} + \left(\frac{68}{9} - \frac{40}{9}\right) = \frac{79}{9} + \frac{28}{9} = \frac{107}{9} = 11\frac{8}{9}$$

$$b) 11\frac{2}{19} - \left(3\frac{17}{19} + 6\frac{14}{19}\right) = \frac{211}{19} - \left((3+6) + \left(\frac{17}{19} + \frac{14}{19}\right)\right) = \frac{211}{19} - \left(9 + \frac{31}{19}\right) = \frac{211}{19} - \left(9 + 1 + \frac{12}{19}\right) = \frac{214}{19} - \left(10 + \frac{12}{19}\right) = \frac{211}{19} - \frac{202}{19} = \frac{9}{19}$$

3. $v_k=12 \text{ km/s}$

$$t_1=3 \text{ s}$$

$$t_2=5 \text{ s}$$

$$v_t=3 \text{ km/s}$$

$$S=?$$

$$v = \frac{s}{t}$$

$$s = v * t$$

$$S_1 = (v_k + v_t) * t_1$$

$$S_2 = (v_k - v_t) * t_2$$

$$S_1 = (12 + 3) * 3 = 45 \text{ km}$$

$$S_2 = (12 - 3) * 5 = 45 \text{ km}$$

$$S = S_1 + S_2$$

$$S = 45 + 45 = 90$$

4. $3,8(x + 1,3) - 9,5$

$$3,8(x+1,3) \div 3,8 = 9,5 \div 3,8$$

$$x+1,3 = 9,5 \div 3,8$$

$$x+1,3 = 2,5$$

$$x = 2,5 - 1,3$$

$$x = 1,2$$

5. To'gri to'rtburchak shaklidagi yer maydonining yuzasi 12 ar. Yer maydonining eni 30 m. Yer maydonining uzunligi nimaga teng ?

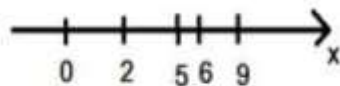
$$12 \text{ ar} = 12000 \text{ m}^2$$

$$S = a \cdot b$$

$$12000 = 30 \cdot a$$

$$a = 400 \text{ m}$$

Topshiriq 2 Variant 1



1.

2. a) $5m + 6m = 231$;

$$(5+6)m = 231$$

$$11m = 231$$

$$m = 231 \div 11$$

$$m = 21$$

b) $7x - 3x = 412$

$$(7-3)x = 412$$

$$4x = 412$$

$$x = 412 \div 4$$

$$x = 103$$

3. Yashikda 120 kg arpa bor. Yashikdan bir qop arpa olinganidan so'ng, unda 65 % arpa qoldi. Qopga qancha arpa solingan ?

$$120 : 100 = 1.2 = 1\% \quad 100\% - 65\% = 35\% \quad 35 \cdot 1.2 = 42 \text{ kg}$$

4. Amallarni bajaring: $0,81 : 2,7 + 4,5 \cdot 0,12 - 0,69$

$$(0,81 : 2,7) + 4,5 \cdot 0,12 - 0,69 = 0,3 + (4,5 \cdot 0,12) - 0,69 = (0,3 + 0,54) - 0,69 = 0,84 - 0,69 = 0,15$$

5. To'g'ri to'rtburchakning bo'yi 78 sm, eni esa bo'yidan 3 marta qisqa. Shu to'g'ri to'rtburchakning perimetri va yuzasini toping.

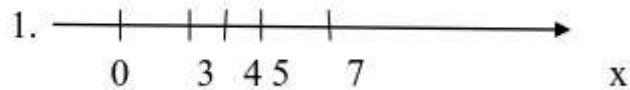
$$S = ? \quad P = ?$$

$$78 : 3 = 26 \text{ sm} - b$$

$$78 \cdot 26 = 2028 \quad S = 2028$$

$$78 + 26 \cdot 2 = 208 \quad P = 208$$

Variant 2



2. a) $4x+7x=132$;

$$(4+7)x=132$$

$$11x=132$$

$$X=132\div 11$$

$$X=12$$

b) $5m-3m-222$.

$$(5-3)m-222$$

$$2m-222$$

$$2(m-111)$$

3. Yashikda 120 kg guruch bor. Bir necha kundan so'ng yashikdagi guruchning 25 % i qoldi. Yashikdan necha kg guruch olingan ?

J; $120:100=1.2=1\%$ $100\%-25\%=75\%$ $75*1.2=90\text{kg}$

4. $0,56:1,4+8,6\cdot 0,15-0,15=0,4+1,29-0,15=1,54$

5. To'g'ri to'rtburchakning eni 18 m, va u bo'yidan 4 marta qisqa. Shu to'g'ri to'rtburchakning perimetri va yuzasini toping.

$$P=?18*4=72\text{-uzuinligi}$$

$$18*72=1296\text{-yuzasi}$$

$$(18+72)*2=180\text{-perimetri}$$

Topshiriq 3

Variant 1.

1. Sonlarni yaxlitlang: a) 73847 sonini minglar xonasiga;

b) 65237 sonini yuzlar xonasigacha; b) 578299 sonini o'n minglar xonasiga.

73847 minglar xonasigacha 74 000

65237 yuzlar xonasigacha 65 200

578 299 on mingliklar xonasigacha 580 000

2. $(823-k)+m$, agar $k=754, m=258$.

$$J: (823-754)+258=327$$

3. Javob:

1. 10 ta yashikda jami qancha kilogram olma olib kelinganini aniqlaymiz.

$$3,6 \cdot 10 = 36 \text{ kilogram}$$

2. 40ta qutida jami necha kg olma olib kelinganini aniqlaymiz.

$$3,2 \cdot 40 = 128 \text{ kilogram}$$

3. Jami bo'lib magazinga necha kilo olma olib kelinganini hisoblaymiz

$$36 + 128 = 164 \text{ kilogram.}$$

4. Jami nechta yashikda olma olib kelinganini aniqlaymiz.

$$10 + 40 = 50 \text{ yashikda.}$$

Masalaga javob beramiz

5. Bitta yashikda o'rtacha qancha olma borligini aniqlaymiz.

$$164 / 50 = 3,28 \text{ kilogram.}$$

Javob: 3.28 kg

4. $x - 1\frac{5}{7} = 2\frac{1}{7}$

$$x - \frac{12}{7} = \frac{15}{7}$$

$$x = \frac{12}{7} + \frac{15}{7}$$

$$x = \frac{12 + 15}{7}$$

$$x = \frac{27}{7}$$

$$x = 3\frac{6}{7}$$

5. Yechish:

$$\begin{aligned} \text{Eni (W)} &= 3,8 \\ \text{Uzunligi (L)} &= W + 0,7 \\ \text{Bo'yi (H)} &= L / 1,5 \\ \text{Maydon (V)} &= W * L * H = 3,8 * (W + 0,7) * (L / 1,5) \\ V &= 3,8 * (3,8 + 0,7) * ((3,8 + 0,7) / 1,5) \\ V &= 3,8 * 4,5 * 3 = 51,3 \text{ kub m} \end{aligned}$$

Variant 2

- 1) Sonlarni yaxlitlang: a) $147827 = 148000$
- б) $24869 = 24900$
- в) $586382 = 59000$
- 2) **Ifodani qiymatini toping.** $(654+a)-b$, если $a=549, b=193$
3. J: $(654+549)-193=1010$

- 3) $3 * 0,9 = 2,7$ (t) birinchi 3 kunlikda umumiy terilgan
- $2 * 1,3 = 2,6$ (t) qolgan 2 kunda umumiy terilgan
- $2,7 + 2,6 = 5,3$ (t) umumiy terildi
- $2 + 3 = 5$ (kun) – umumiy ishlashdi
- $5,3 : 5 = 1,06$ (t) 1 kunda o'rtacha terishdi

Javob: 1,06 t

$$4) y - 2\frac{1}{5} - 5\frac{2}{5}$$

$$y - \frac{11}{5} = \frac{27}{5}$$

$$y = \frac{27}{5} + \frac{11}{5}$$

$$y = \frac{38}{5}$$

$$y = 7\frac{3}{5}$$

- 5) $5 - 1,64 = 3,36$ (m)-eni
- $3,36 : 1,2 = 2,8$ (m)-bo'yi
- $3,36 * 2,8 * 5 = 47,04$ (m³)-yuzasi

Topshiriq 4 Variant 1

1. 26012 soni 49156 sonidan qanchaga kichik va 17381 sonidan qanchaga katta?

$$J: 49156 - 26012 = 23144$$

$$J: 26012 - 17381 = 8631$$

2. $3,8 + 1,3 = 5,1$ km/s

$$5,1 * 0,8 = 4,08$$
 km

$$3,8 - 1,3 = 2,5$$
 km/s

$$2,5 * 0,3 = 0,75$$
 km

$$4,08 + 0,75 = 4,83$$
 km

3. A) $\frac{6}{13} + \frac{4}{13} - \frac{8}{13} = \frac{6+4-8}{13} = \frac{2}{13}$

$$\text{B) } 7\frac{13}{15} - \left(2\frac{7}{15} + 3\frac{4}{15}\right) = \frac{118}{15} - \left((2+3) + \left(\frac{7}{15} + \frac{4}{15}\right)\right) = \frac{118}{15} - \left(5 + \frac{11}{15}\right) = \frac{118}{15} - 5\frac{11}{15} = \frac{118}{15} - \frac{86}{15} = \frac{32}{15} = 2\frac{2}{15}$$

4. $(4,5 - x) * 5,8 = 8,7$

$$26,1 - 5,8x = 8,7$$

$$-5,8x = 8,7 - 26,1$$

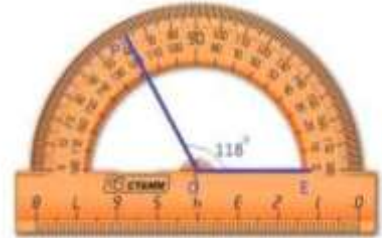
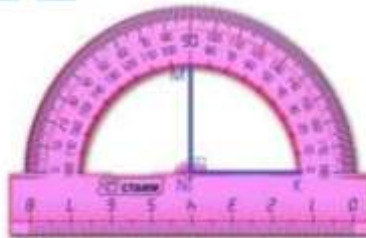
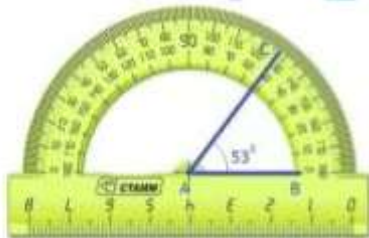
$$-5,8x = -17,4$$

$$-5,8x \div (-5,8) = -17,4 \div (-5,8)$$

$$X = -17,4 \div (-5,8)$$

$$X = 3$$

5.



Variant 2

1. $37123-27843=9280$. $27843-11248=16595$

2. A) $\frac{2}{9} + \frac{6}{9} - \frac{3}{9} = \frac{2+6-3}{9} = \frac{5}{9}$

B) $8\frac{25}{27} - \left(3\frac{8}{27} + 2\frac{3}{27}\right) = \frac{241}{27} - \left((3+2) + \left(\frac{8}{27} + \frac{3}{27}\right)\right) = \frac{241}{27} - \left(5 + \frac{11}{27}\right) =$
 $\frac{241}{27} - 5\frac{11}{27} = \frac{241}{27} - \frac{146}{27} = \frac{95}{27} = 3\frac{14}{27}$

B) $\left(8\frac{3}{17} - 7\frac{15}{17}\right) + 3\frac{16}{17} = \left(\frac{139}{17} - \frac{134}{17}\right) + \frac{67}{17} = \frac{5}{17} + \frac{67}{17} = \frac{72}{17} = 4\frac{4}{17}$

3. $v_k=40$ km/s

$t_1=2,5$ s

$t_2=0,8$ s

$v_t=2,2$ km/s

$S = ?$

$v = \frac{s}{t}$

$s = v * t$

$S_1 = (v_k + v_t) * t_1$

$S_2 = (v_k - v_t) * t_2$

$S_1 = (40 + 2,2) * 2,5 = 105,5$ km

$S_2 = (40 - 2,2) * 0,8 = 30,24$ km

$S = S_1 + S_2$

$S = 105,5 + 30,24 = 135,74$ km

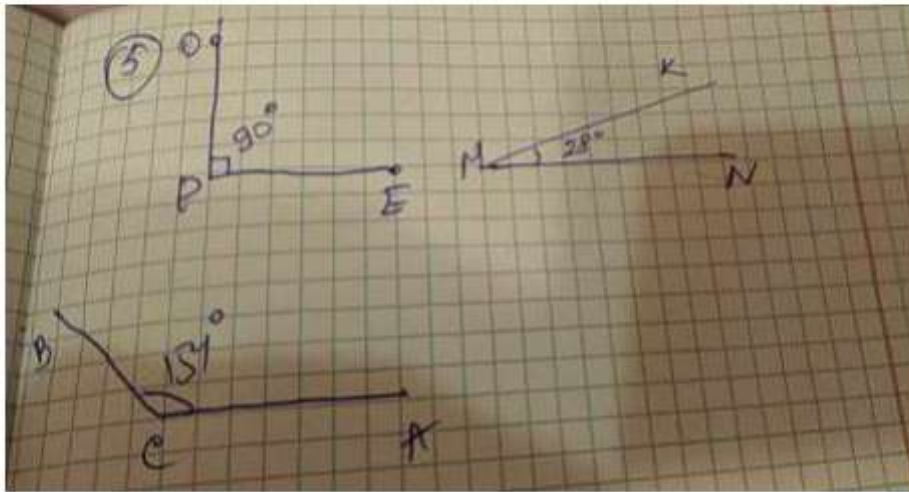
4. $4,2 \cdot (0,25+x)=1,47$

$0,25+x=0,35$

$X=0,35-0,25$

$X=0,1$

5.



Topshiriq 5

Variant 1

- a) $35^2 - 34 * 32 = 1225 - 1088 = 137$
 b) $(14 + 16^2) \div 15 = \frac{14+16^2}{15} = \frac{14+256}{15} = \frac{270}{15} = 18$

2. Ifodaning qiymatini hisoblang: $45,2 - a : b$, если $a=0,339, b=0,12$.

$$45,2 - 0,339 \div 0,12 = 45,2 - 2,825 = 42,375$$

- Istirohat bog'ining 3 ta gulzor va yo'lkalari bo'ylab 46 ta atirgul ko'chati ekildi. Agar yo'lklar bo'ylab 16 ta atirgul ekilgan bo'lsa, 1 ta gulzorga nechta atirgul ekilgan ?

Yechilishi:

$$\frac{(46-16)}{3} = \frac{30}{3} = 10.$$

Javob 10 ta atirgul ko'chati

$$4. A) \left(x + \frac{1}{7}\right) - \frac{4}{7} = \frac{2}{7}$$

$$x + \frac{1}{7} - \frac{4}{7} = \frac{2}{7}$$

$$x - \frac{3}{7} = \frac{2}{7}$$

$$x = \frac{2}{7} + \frac{3}{7}$$

$$x = \frac{5}{7}$$

$$B) \left(x - \frac{17}{9}\right) + \frac{34}{9} = \frac{40}{9}$$

$$x - \frac{17}{9} + \frac{34}{9} = \frac{40}{9}$$

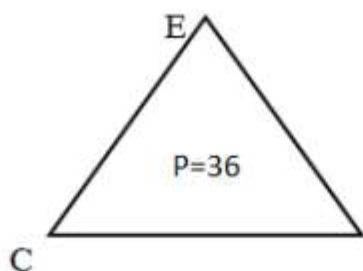
$$x + \frac{17}{9} - \frac{40}{9}$$

$$x = \frac{40}{9} - \frac{17}{9}$$

$$x = \frac{23}{9}$$

$$x = 2\frac{5}{9}$$

5. CE uchburchakning perimetri 36 dm. CE tomoni 15 dm. ED tomoni esa CE tomonidan 3 marta qisqa. CD tomoning uzunligini toping.



$$ED = \frac{CE}{3} = \frac{15}{3} = 5 \text{ dm}$$

$$CD = 36 - 15 - 5$$

$$\mathbf{J: CD=16}$$

D

Variant 2

1. A) $28^2 - 27 \times 25 = 784 - 675 = 109$

B) $(21^2 + 53) \div 26 = \frac{21^2 + 53}{26} = \frac{441 + 53}{26} = \frac{494}{26} = 19.$

2. $45,2 - 32,16 \div 0,8 = 45,2 - 40,2 = 5$

3. Suzishdi – 5 дней

Jami – 98 км

1 kunda – 22 км

2nchidan 5nchi kungacha- X km

X=?

Yechilishi:

$$4x + 22 = 98$$

$$4x = 98 - 22$$

$$4x = 76$$

$$X = 14 \text{ km}$$

4. A) $\frac{5}{9} + \left(x - \frac{2}{9}\right) = \frac{7}{9}$

$$\frac{5}{9} + x - \frac{2}{9} = \frac{7}{9}$$

$$\frac{1}{3} + x = \frac{7}{9}$$

$$x = \frac{7}{9} - \frac{1}{3}$$

$$x = \frac{4}{9}$$

B) $\left(x + 2\frac{9}{11}\right) - 4\frac{10}{11} = 1\frac{4}{11}$

$$\left(x + \frac{31}{11}\right) - \frac{54}{11} = \frac{15}{11}$$

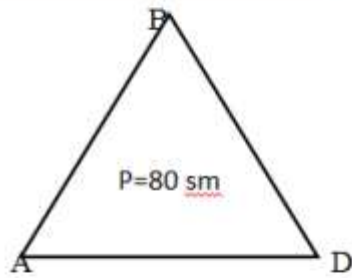
$$x + \frac{31}{11} - \frac{54}{11} = \frac{15}{11}$$

$$x - \frac{23}{11} = \frac{15}{11}$$

$$x = \frac{15}{11} + \frac{23}{11}$$

$$x = \frac{38}{11}$$
$$x = 3\frac{5}{11}$$

5. ABD uchburchakning perimetri 80 sm. AB tomoni 12 sm, BD tomoni esa AB tomonidan 3 marta uzun AD tomonning uzunligini toping.



$$BD=3*AB \quad BD=3*12$$

$$BD=36$$

$$AD=80-36-12$$

$$AD=32$$

@uzimtihor