

2019-yil

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

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

IMTIHON JAVOBLARI

MATEMATIKA

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$$\text{Eslatma: } \mathbf{a/b = \frac{a}{b}}$$

$$\mathbf{a^x = a^x}$$

1-bilet

1. Tenglamani yeching $\sin x = \cos x$

$$\frac{\sin x}{\sin x} = \frac{\cos x}{\sin x} \rightarrow \mathbf{1 = \operatorname{ctg} x} \rightarrow \mathbf{x = \frac{\pi}{4} + \pi k \quad k \in \mathbb{Z}}$$

2. $\log_2(3x + 1) > \log_2(x - 1)$

$$\begin{cases} 3x + 1 > 0 \\ x - 1 > 0 \end{cases} \rightarrow \begin{cases} 3x > -1 \\ x > 1 \end{cases} \rightarrow \begin{cases} x > -\frac{1}{3} \\ x > 1 \end{cases}$$

3x+1>x-1

2x>-2

x>-1 Javob: x>1

3 $s(t) = 30t - 16t^2$ $v = 30 \text{ m/h}$

$$s'(t) = v(t) \quad s'(t) = 30 - 32t$$

$$v(t) = 0 \quad 30 - 32t = 0 \rightarrow t = 15/16 \text{ s}$$

$$s(15/16) = 30 \cdot 15/16 - 16 \cdot \frac{15^2}{16} = 225/16 \text{ m}$$

4 $a = 13 \text{ sm}$ $b = 14 \text{ sm}$ $c = 15 \text{ sm}$ $h = 14 \text{ sm}$

$$r = \frac{2S}{a+b+c} \quad p = \frac{13+14+15}{2} = 21$$

$$S = \sqrt{p(p-a)(p-b)(p-c)} = \sqrt{21(21-13)(21-14)(21-15)} = 84$$

$$r = \frac{2 \cdot 84}{13+14+15} = 4 \quad h^2 = r^2 + H^2 \rightarrow H = 6\sqrt{5}$$

Javob; H = 6√5

5 $S=9 \text{ sm}^2$

$9=\frac{1}{2}2R^*R \quad R=3$

$V=\frac{4}{3}\pi R^3=\frac{4}{3}\pi 3^3=36\pi \quad \text{Javob; } V=36$

2 Bilet

1 $\log_2(x - 5) + \log_2(x + 2) = 3$

$\log_2(x - 5)(x+2)=3$

$x^2 - 3x - 10 = 8 \rightarrow x=6 \quad x=-3$

Javob; $x=6$

2 $\sin 2x \geq \frac{1}{2}$

$\frac{\pi}{12} + 2\pi k \leq x \leq \frac{5\pi}{12} + 2\pi k$

3 $S(t)=40t-16*t^2 \quad v=40 \text{ m\h}$

$S'(t)=V(t)$

$S'(t)=40-32t$

$V(t)=0 \quad 40-32t=0 \rightarrow t=\frac{5}{4} \text{ s}$

$S(\frac{5}{4})=40*\frac{5}{4}-16*\frac{5^2}{4}=25 \text{ m}$

4 $\alpha = 60^\circ \quad \beta = 45^\circ$



$\sin 30^\circ = \frac{x}{a} \quad \sin 45^\circ = \frac{x}{b}$

$x = \sin 30^\circ * a \quad X = \sin 45^\circ * b$

$\frac{1}{2} * a = \frac{\sqrt{2}}{2} * b \quad a = \sqrt{2} * b$

5 $R=13 \quad h=10 \quad x=?$

$x = \sqrt{R^2 - h^2} \quad x = \sqrt{13^2 - 10^2} = \sqrt{69}$

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Imtihon bileti narhi

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To'lov klik yoki payme orqali

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Javoblar 2019-yil savollari asosida tuzilgan. 40ta biletga javoblarni o'z ichiga oladi. To'lov qilishdan oldin admin bilan bog'laning.

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