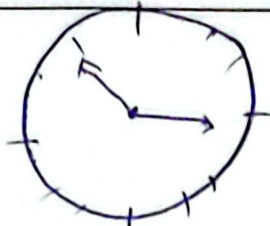


نام و نام خانوادگی برای این صفحه پاسخنامه تشریحی شماره ۱۹۰ ... کلاس (دوره اول متوسطه) ...

۱)  $\Rightarrow (2 \times 30) + (6 \times 6) + 17 = 152$

۱) $(\overset{297}{10 \times 54}) - (\overset{90}{20 \times 2}) = 207 \rightarrow \text{بزرگ}$
 $190 - 207 = 17$ ✓

۲)  $(2 \times 30) + (2 \times 6) + 7 = 11$

۱) $\frac{(10 \times 54 + 1) - (2 \times 30)}{99 - 180} = 11$

۳) $\text{مساحت} = \frac{\alpha}{2} r^2 = \frac{\pi}{\frac{4}{3}} \times 9 \rightarrow \frac{\pi}{5} \times 9^3 = 2\pi$

۱) $1401 = \alpha r = \frac{\pi}{\frac{4}{3}} \times 9 = \frac{\pi}{2}$
 $\frac{1}{2} = (2 \times 21) + \frac{\pi}{2} = 42 + \frac{\pi}{2}$

۴) $\frac{1}{r} \times A \times \frac{r_0}{r} \times \frac{\sqrt{3}}{r} = 10\sqrt{3}$

۱) $\sqrt{4r + 20 - \left(\frac{r_0}{r} \times \frac{1}{r} \right)} = V$
 قطع BC

$\frac{1}{2} = V + 8 + 5 = 20$

$\frac{10}{\frac{r_0}{r}} = \frac{10\sqrt{2}}{\sin B} \Rightarrow \sin B = \frac{10\sqrt{2}}{r_0 r} = \frac{\sqrt{2}}{2} \Rightarrow B = 45^\circ$ جانب

$C = 10 \times 45 = 105^\circ$ $\left| \begin{array}{l} \text{و این } \Rightarrow B = 45^\circ \times \frac{\pi}{180} = \frac{\pi}{4} \\ \text{و این } \Rightarrow C = 105^\circ \times \frac{\pi}{180} = \frac{7\pi}{12} \end{array} \right.$

$$\frac{-\tan \alpha + \gamma \tan \alpha}{-\tan \alpha - \gamma \tan \alpha} = \frac{\gamma \tan \alpha}{-\gamma \tan \alpha} = -1$$

8

$$\begin{aligned} \tan v_0 &= \tan(\pi - \theta) = -\cot \theta \\ \tan \theta &= \tan(\pi - v_0) = -\tan v_0 \\ \tan \theta &= \tan(\pi - \theta) = -\tan \theta \\ \tan \gamma \theta &= \tan(\pi + v_0) = \tan v_0 \\ \frac{\theta}{\text{rad}} &= \frac{\text{Rad}}{\pi} \rightarrow \text{Rad} = \frac{\pi}{180} \theta \\ \tan v_0, \cot \theta &= \frac{1}{a} \end{aligned}$$

$$\frac{\gamma \left(\frac{1}{a} + \left(-\frac{1}{a} \right) \right)}{\gamma \left(-\frac{1}{a} \right) - \frac{1}{a}} = \frac{\frac{1}{a}}{-\frac{1}{a} - \frac{1}{a}}$$

$$\frac{\frac{1}{a}}{-\frac{1}{a} - \frac{1}{a}} = \frac{1}{-\frac{1}{a} - \frac{1}{a}} = \frac{-1}{\frac{1}{a} + 1}$$

9

$$\sin^2 \alpha + \cos^2 \alpha + \gamma \sin \alpha \cos \alpha + \sin^2 \alpha + \cos^2 \alpha - \gamma \sin \alpha \cos \alpha$$

$$(\sin \alpha - \cos \alpha)(\sin \alpha + \cos \alpha) = \sin^2 \alpha - \cos^2 \alpha$$

$$= \frac{\gamma(\sin^2 \alpha + \cos^2 \alpha)}{\sin^2 \alpha - \cos^2 \alpha} = \frac{\gamma}{\sin^2 \alpha - \cos^2 \alpha} = \gamma$$

$$\cos^2 \alpha = 1 - \sin^2 \alpha$$

$$\gamma = \gamma \sin^2 \alpha - \gamma \cos^2 \alpha = \gamma \sin^2 \alpha - \gamma(1 - \sin^2 \alpha) = 2\gamma \sin^2 \alpha - \gamma$$

$$\sin^2 \alpha - \gamma \cos^2 \alpha + 1 = (1 - \cos^2 \alpha) - \gamma \cos^2 \alpha + 1 = 2 - \gamma \cos^2 \alpha$$

$$\sin^2 \alpha + \gamma \cos^2 \alpha - 1 = (1 - \cos^2 \alpha) + \gamma \cos^2 \alpha - 1 = \cos^2 \alpha$$

$$\begin{aligned} \cos^2 \alpha &= 1 - \sin^2 \alpha \\ &= 1 - \frac{1}{\gamma^2} = \frac{\gamma^2 - 1}{\gamma^2} \\ \tan^2 \alpha &= \frac{\sin^2 \alpha}{\cos^2 \alpha} \rightarrow \frac{1}{\gamma^2} = \frac{\gamma^2 - 1}{\gamma^2} \end{aligned}$$

$$\frac{\gamma - \gamma \cos^2 \alpha}{\cos^2 \alpha} = \gamma \rightarrow \gamma - \gamma \cos^2 \alpha = \gamma \cos^2 \alpha \rightarrow \gamma = 2\gamma \cos^2 \alpha \rightarrow \cos^2 \alpha = \frac{1}{2}$$

$$\sin^2 \alpha = 1 - \cos^2 \alpha = 1 - \frac{1}{2} = \frac{1}{2}$$

$$\tan^2 \alpha = \frac{1}{1} = 1$$

$$\cos^2 \alpha = 1 - \sin^2 \alpha \leftarrow \cos^2 \alpha = 1 - \sin^2 \alpha$$

$$\begin{aligned} \cos^2 \alpha &= 1 - \sin^2 \alpha - \sin^2 \alpha \\ &= 1 - 2\sin^2 \alpha \end{aligned}$$

10

$$\sin(90 - \gamma \theta)$$

$$\alpha = \gamma \theta$$

$$\gamma \alpha = \gamma^2 \theta$$

$$\cos \gamma \alpha = \frac{\sqrt{\gamma}}{\gamma} = 1 - \gamma \sin^2 \alpha$$

$$\cos \gamma \theta = \frac{\sqrt{\gamma} + \sqrt{\gamma}}{\gamma}$$

$$1 - \gamma \sin^2 \alpha = \frac{\sqrt{\gamma} - 1}{\gamma} \rightarrow \gamma \sin^2 \alpha = \frac{\gamma - \sqrt{\gamma}}{\gamma}$$

$$\begin{aligned} \sin^2 \alpha &= \frac{\gamma - \sqrt{\gamma}}{\gamma} \rightarrow \cos^2 \alpha = 1 - \sin^2 \alpha \rightarrow 1 - \frac{\gamma - \sqrt{\gamma}}{\gamma} = \frac{\gamma - \gamma + \sqrt{\gamma}}{\gamma} \\ &= \frac{\sqrt{\gamma}}{\gamma} = \cos^2 \alpha \rightarrow \cos \alpha = \frac{\sqrt{\gamma} + \sqrt{\gamma}}{\gamma} \end{aligned}$$