

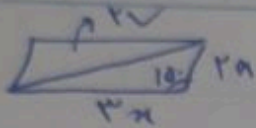
بار (دھم افتر)

19, 75

زھرا انعامی

Subject

Date



$$\frac{1}{2} \times 3 \times 2 \times \sin A = \frac{1}{2} \times 10 \times 2 \times \sin A$$

$$\frac{3}{2} \times 2 \times 2 = 10 \times \sin A \rightarrow \sin A = \frac{6}{10} = \frac{3}{5}$$

$$3 \times 3\sqrt{2} = 9\sqrt{2} \times 2 = 18\sqrt{2}$$

$$2 \times 3\sqrt{2} = 6\sqrt{2} \times 2 = 12\sqrt{2}$$

$$\rightarrow \boxed{3\sqrt{2}} \quad \text{سے بانیع}$$

$$\frac{1}{2} \times AB \times AC \times \sin(A) = \frac{1}{2} \times 10 \times 10 \times \sin A$$

$$\frac{1}{2} \times AE \times AD \times \sin A = \frac{1}{2} \times 10 \times 10 \times \sin A$$

$$\frac{1}{2} \times 10 \times 10 \times \sin A = \frac{1}{2} \times 10 \times 10 \times \sin A$$

$$\frac{1}{2} \times 10 \times 10 \times \sin A = \frac{1}{2} \times 10 \times 10 \times \sin A$$

$$\frac{10}{2} \sin A = \frac{10}{2} \sin A \Rightarrow \frac{10}{2} \sin A = \frac{10}{2} \sin A \rightarrow \sin A = \frac{1}{2}$$

$$\sin A = \frac{1}{2} \Rightarrow A = 30^\circ \Rightarrow \tan 30^\circ = \frac{\sqrt{3}}{3}$$

جوں لفتہ

$$\frac{|\sin \alpha|}{\cos \alpha} = \frac{1}{\cot \alpha} \Rightarrow \frac{1}{\sqrt{\cos^2 \alpha}} = \tan \alpha \cdot \frac{1 + \sin \alpha}{|\cos \alpha|} \quad \text{سوال (1)}$$

$$|\tan \alpha| = \frac{1}{\cot \alpha} \Rightarrow \tan \alpha \rightarrow \text{مع ادم با هم}$$

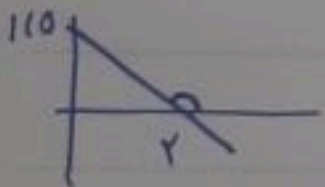
$$\frac{1}{|\cos \alpha|} - \frac{1 + \sin \alpha}{|\cos \alpha|} = \tan \alpha \rightarrow \frac{-\sin \alpha}{|\cos \alpha|} = \frac{\sin \alpha}{\cos \alpha} \rightarrow \cos \alpha < 0$$

$$\frac{|\sin \alpha|}{\cos \alpha} = \frac{-\sin \alpha}{\cos \alpha} \rightarrow \sin \alpha < 0$$

ربع سوم

5

$$m = \frac{0 - 110}{x - 0} = -\frac{110}{x} = \tan \theta \quad \text{سوال (ع) شکل نسبت (-) است}$$



$$\theta = \pi - \alpha \rightarrow \tan(\theta) = \tan(\pi - \alpha)$$

$$\tan(\alpha) = \frac{110}{x} \leftarrow \begin{matrix} \downarrow \\ m = -\tan(\alpha) \\ \frac{110}{x} \end{matrix}$$

$$\tan\left(\frac{\pi}{2} - \alpha\right) = \cot(\alpha)$$

$$\tan\left(\frac{\pi}{2} - \alpha\right) = \cot(\alpha) = \frac{1}{\tan(\alpha)} = \frac{x}{110}$$

(1, 110)

$$\tan\left(\frac{\pi}{2} - \alpha\right) = \left[\frac{x}{110} \right]$$

15

$$\frac{\pi \cos(\frac{\pi}{4}) - \pi \sin(\frac{\pi}{4})}{\sin(\frac{\pi}{4}) - \cos(\frac{\pi}{4})} = \frac{-\pi \sin \frac{\pi}{4} - \pi \sin \frac{\pi}{4}}{-\sin \frac{\pi}{4} - \sin \frac{\pi}{4}}$$

$$\frac{-\pi \sin \frac{\pi}{4} - \pi \sin \frac{\pi}{4}}{-\sin \frac{\pi}{4} - \sin \frac{\pi}{4}} = \frac{-2\pi \sin \frac{\pi}{4}}{-2 \sin \frac{\pi}{4}}$$

$\boxed{\pi/\Delta}$

5

$$\sin(\frac{5\pi}{4}) - \sin(\alpha - \pi)$$

1,0

پہلے درجہ $\leftarrow \alpha$ (4)

$$\sin \alpha = -$$

$$\cos = \frac{1}{\sqrt{2}} \leftarrow \cos \alpha = \frac{1}{\sqrt{2}}$$

$$\cos^2 + \sin^2 = 1$$

$$\frac{1}{2} + \frac{1}{2} = 1$$

$$\frac{\cos \alpha + \sin \alpha}{|\tan \alpha - 1|} = \frac{\frac{1}{\sqrt{2}} + \frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}} - 1}$$

$$\sin \frac{5\pi}{4} = -\frac{1}{\sqrt{2}}$$

$$\frac{\sqrt{2}}{2} = \frac{\sqrt{2}}{2} = \frac{\sin}{\cos}$$

$$\frac{\frac{1+\sqrt{2}}{\sqrt{2}}}{\frac{1-\sqrt{2}}{\sqrt{2}}} = \frac{1+\sqrt{2}}{1-\sqrt{2}}$$

$$\sin^2 \alpha + \cos^2 \alpha = 1 \quad (V)$$

$$(\pi \cos \alpha)^2 + \cos^2 \alpha = 1$$

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

$$2 \cos^2 \alpha = \frac{1}{\Delta}$$

cos \in $[-\frac{\sqrt{5}}{5}]$ یعنی اس وقت سے جب تک $\cos \alpha = -\frac{1}{\sqrt{5}}$

$$-2y = 9 \rightarrow y = -\frac{9}{2} \quad \left. \begin{array}{l} \textcircled{1} \\ \frac{2\sqrt{3}x}{2} = 2 \rightarrow x_1 = \frac{2\sqrt{3}}{2} \end{array} \right\} \text{ممكن}$$

$$\textcircled{2} m \times -\sqrt{3} \text{ DMS} \rightarrow -2\sqrt{3}x - 2y = 2 \rightarrow 2\sqrt{3}x + 2y = -2 \rightarrow \sqrt{3}x + y = -1$$

$$m \alpha + (m^2 - 1)y = 2 \quad \text{حيث } \tan \alpha = \sqrt{3} \quad (1)$$

$$(m^2 + 1)y = -2m\alpha = 2 \Rightarrow \text{حيث } K_2 = \frac{2m}{m^2 - 1} = \sqrt{3} \quad (1, 5)$$

$$-2m = \sqrt{3}(m^2 - 1) \Rightarrow \sqrt{3}m^2 + 2m - \sqrt{3} = 0 \quad \Delta = 4 + 12 = 16$$

$$m_1 = \frac{-2 + \sqrt{16}}{2\sqrt{3}} = \frac{-2 + 4}{2\sqrt{3}} = \frac{2}{2\sqrt{3}} = \frac{1}{\sqrt{3}} \rightarrow 2\left(\frac{1}{\sqrt{3}}\right)\alpha + \left(\left(\frac{1}{\sqrt{3}}\right)^2 - 1\right)y = 2$$

$$\frac{2\sqrt{3}\alpha}{\sqrt{3}} - \frac{2}{\sqrt{3}}y = 2 \quad m_2 = -\sqrt{3} \quad \frac{1}{\sqrt{3}} = m_2$$

$$|m_1 - m_2| = \frac{\sqrt{\Delta}}{|a|} = \frac{4}{\sqrt{3}}$$

$$\tan\left(\frac{\pi}{6} - \alpha\right) = \frac{1-m}{1+m} > -\frac{\pi}{6} < \alpha < \frac{\pi}{6} \rightarrow -1 < \tan \alpha < 1 \quad (9)$$

$$\tan\left(\frac{\pi}{6} - \alpha\right) = \frac{1 - \tan \alpha}{1 + \tan \alpha} = \frac{1-t}{1+t} \quad -1 < t < 1 \quad (5)$$

$$\frac{1-t}{1+t} = \frac{1-m}{1+m} \Rightarrow (1-t)(1+m) = (1-m)(1+t)$$

$$1+m - t - mt = 1+t - m - mt$$

$$1+m - 1 - t = 1+t - 1 - m \Rightarrow m - t = t - m \Rightarrow 2m = 2t \Rightarrow m = t$$

$$A \Rightarrow 1+m < 2 \quad 1+m < 2 \rightarrow m < 1$$

$$B \Rightarrow -2 < 1+m < -1 \quad -1 < 1+m < 0 \rightarrow m > -2$$

$$\tan(\pi - \alpha) \cos(\pi - \alpha) + \tan(\alpha) \sin(\alpha) \quad (1)$$

$$\textcircled{A} \tan(\pi - \alpha) = -\tan(\alpha) \times \frac{\cos(\pi - \alpha)}{-\cos(\alpha)} \Rightarrow -\sqrt{3} \times \frac{-\sqrt{3}}{1} = \frac{3}{1}$$

$$\textcircled{B} \tan(\pi - \alpha) + \tan(\pi - \alpha) = -\tan(\alpha) - \sqrt{3}$$

$$\sin(\pi - \alpha) = (\pi - \alpha) + (\pi - \alpha) = \sin(\alpha) = \frac{\sqrt{3}}{2}$$

$$\frac{\sqrt{3}}{2} \times \sqrt{3} - \frac{3}{2} = \frac{3}{2} - \frac{3}{2} = 0$$