

لیکھا دھوا سنائی۔ دم دھتہ C - 1A

$$\textcircled{1} \text{ الف) } \tan \frac{3\pi}{4} + \sin \frac{\pi}{4} \cos \frac{\pi}{4} \rightarrow -1 + \left(\frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} \right) = -\frac{1}{2}$$

$$\text{ب) } \tan \frac{\pi}{4} \sin \frac{\pi}{4} + \cos \frac{\pi}{4} = \left(\frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} \right) + \left(\frac{\sqrt{2}}{2} \right) = \frac{3}{2}$$

$$\textcircled{2} \cot = \frac{\cos}{\sin} = f \rightarrow \cos = f \sin \quad \frac{1 \sin - \sin}{f \sin + \sin} = \frac{1 \sin}{\omega \sin} = \frac{1}{\omega}$$

$$\textcircled{3} \sin^2 + \cos^2 = 1 \rightarrow f \cos^2 + \cos^2 = 1 \rightarrow \cos^2 = \frac{1}{1+f^2} \rightarrow \cos = \frac{1}{\sqrt{1+f^2}}$$

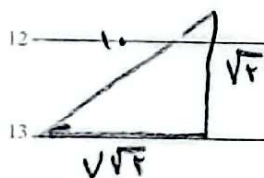
جب ω بڑھتا ہے

$$\textcircled{4} \cos(\alpha + \beta) = \cos \alpha \cos \beta - \sin \alpha \sin \beta$$

$$\text{الف) } \cos\left(\frac{3\pi}{4} + \alpha\right) = \left(\left(-\frac{\sqrt{2}}{2}\right)\left(-\frac{\sqrt{2}}{2}\right)\right) - \left(\left(\frac{\sqrt{2}}{2}\right)\left(\frac{\sqrt{2}}{2}\right)\right) = \frac{0}{2}$$

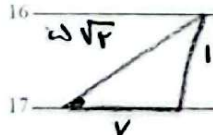
$$\cos \frac{11\pi}{4} = \frac{1}{2}$$

$$\frac{1f}{20} = \frac{1}{10} \rightarrow \frac{1}{10}$$



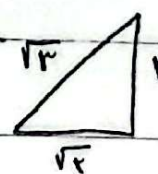
$$\text{ب) } \sin\left(\frac{\pi}{4} + \alpha\right) = \left(\left(-\frac{\sqrt{2}}{2}\right)\left(\frac{1}{2\sqrt{2}}\right)\right) + \left(\left(\frac{1}{2\sqrt{2}}\right)\left(-\frac{\sqrt{2}}{2}\right)\right) = -\frac{1}{2}$$

$$\frac{-\frac{1}{2}}{\frac{1}{10}} = -\frac{5}{1}$$



$$\textcircled{5} 2(1 - \cos^2) + \cos^2 = \frac{f}{r} \rightarrow 2 - 2\cos^2 + \cos^2 = \frac{f}{r} \rightarrow \cos = \frac{\sqrt{r}}{\sqrt{r+1}}$$

$$\tan^2 = \frac{\sin^2}{\cos^2} = \frac{1}{\frac{r}{r+1}} = \frac{r+1}{r}$$



Genobar

$$⑧ \quad S_{\triangle ABC} \sim S = \frac{1}{2} \times \sqrt{r} \sin \alpha \sim r \sin \alpha \sim \sin = \frac{r}{\sqrt{r}} = \frac{\sqrt{r}}{r}$$

$$\frac{r_0}{r_0} = \sqrt{r} \quad \text{من سینوس زاویه های مثلث است}$$

$$⑨ \quad \begin{array}{l} \text{Diagram: A parallelogram with sides } r \times \text{ and } r \times \text{ and an angle of } 140^\circ. \\ r \times r \times \sin 140^\circ = \Delta f \sim r \times r = \Delta f \Rightarrow r = \sqrt{14} = \sqrt{r} \\ P = (r \times \sqrt{r}) + (r \times \sqrt{r}) = \sqrt{r} \end{array}$$

$$⑩ \quad S_{ABC} = \frac{V \times \omega}{r} \sin A = \frac{r \omega \sin A}{r}$$

$$S_{ADE} = \frac{V \times \omega}{r} \sin A = \frac{1}{r} \sin A$$

$$\frac{r \omega \sin A}{r} - \frac{r \omega \sin A}{r} = \frac{1}{r} \sin A \rightarrow V \sin A = \frac{r}{\omega} \sim \sin A = \frac{1}{r}$$

$$\sin = \frac{1}{r} \rightarrow A = r^\circ, \tan = \frac{1}{\sqrt{r}}$$

$$⑪ \quad \begin{array}{l} \text{Diagram: A triangle ABC with a point M on BC. A dashed line connects A to M. The length of AM is labeled as } r \times. \\ \left\{ \begin{array}{l} r \times BN, r \times NC \rightarrow BN, \frac{r \times NC}{r} \\ BC = NC + \frac{r \times NC}{r} = \frac{\omega \times NC}{r} \end{array} \right. \\ S_{ABC} = r S_{BMN} \end{array}$$

$$\begin{array}{l} \frac{1}{r} AB \times \frac{\omega \times NC}{r} \times \sin B = r \times \frac{1}{r} MB \times \frac{r \times NC}{r} \times \sin B \rightarrow AB \times \omega \times NC = MB \times r \times NC \rightarrow \omega \times AM = \omega \times BM \\ \omega \times AM = \omega \times BM \rightarrow AM = \frac{r \times BM}{\omega} \rightarrow \frac{BM}{\omega} = \frac{\omega}{r} \end{array}$$

Genobar

$$1 \quad \frac{|\sin|}{\cos} = -\frac{\sin}{\cos} \quad , \quad |\sin| = -\sin, \quad \sin \neq 0$$

$$2$$

$$3 \quad \frac{1}{\sqrt{\cos^2}} \cdot \tan = \frac{1 + \sin}{|\cos|} \quad , \quad 1 - \tan |\cos| = 1 + \sin$$

$$4 \quad \left[\begin{array}{l} \sqrt{\cos^2} \\ |\cos| \end{array} \right]$$

$$5$$

$$6 \quad \tan = \frac{\sin}{\cos} \rightsquigarrow 1 - \frac{\sin}{\cos} |\cos| = 1 + \sin \quad , \quad |\cos| = -\cos$$

$$7$$

$$8 \quad \Rightarrow 1 + \sin = 1 + \sin \quad \text{نورثه} \quad \text{منه جديده} \quad *$$

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