

تکلیف شماره ۱۷

دستم دفتد A

شکلا رضوی ۱۷, ۱۷, ۱۷

$$\text{ا) } \frac{r}{1\pi} = \frac{Rad}{\pi} \rightarrow Rad = \frac{r}{1\pi} \pi = r$$

$$\text{ب) } 120^\circ = \frac{120}{180} = \frac{Rad}{\pi} \rightarrow Rad = \frac{120}{180} \pi = \frac{2}{3} \pi$$

$$\text{ج) } \frac{D}{1\pi} = \frac{0\pi}{1\pi} = \frac{0 \times 180}{180} = 0^\circ$$

$$\text{د) } \frac{D}{1\pi} = \frac{F\pi}{\pi} = 1^\circ$$

$$\frac{120a}{9} = \frac{D}{1\pi} \rightarrow D = \frac{120 \times 180 \times a}{9} = 120a$$

$$\frac{a\pi}{\pi} = \frac{D}{1\pi} \rightarrow D = \frac{180 \times a}{1} = 180a$$

$$120a + 120a + 180 = 360a = 180 \rightarrow a = \frac{1}{2}$$

$$\text{ا) } (\cos 45^\circ \cos 30^\circ - \sin 45^\circ \sin 30^\circ) - \frac{\tan 60^\circ + \tan 45^\circ}{1} = -1 + 2 = 1$$

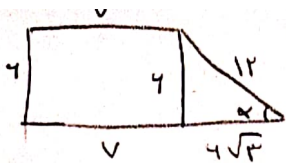
$$\frac{\frac{1}{\sqrt{2}} + \frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}} - \frac{1}{\sqrt{2}}} = \frac{1}{\sqrt{2}} + 1 + 2 = \frac{1}{\sqrt{2}} = \frac{1\sqrt{2}}{2}$$

$$-\frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} + \frac{\sqrt{2}}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = -\frac{1}{2} + \frac{2}{2} = \frac{1}{2} = \frac{1}{2} = \sin^2 \theta \rightarrow \sin \theta = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

$$\tan \theta = -1$$

$$\frac{\frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} (1 - \frac{1}{2})}{(\frac{\sqrt{2}}{2})^2} = \frac{\frac{\sqrt{2}}{2}}{\frac{\sqrt{2}}{2}} = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2} = \tan 45^\circ \rightarrow \frac{40}{180} = \frac{Rad}{\pi} \rightarrow \frac{40\pi}{180} = \frac{1}{9} \pi$$

$$\frac{\frac{r \sin \theta - \cos \theta}{\cos \theta}}{\frac{\sin \theta - r \cos \theta}{\cos \theta}} = \frac{r \tan \theta - 1}{\tan \theta - r} = \frac{10 - 1}{1} = 9$$

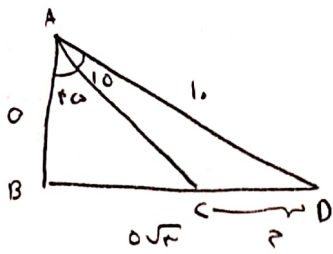


$$\sin \alpha = \frac{1}{2} = \frac{\text{قابل}}{\text{وتر}} = \frac{4}{\text{وتر}} \rightarrow \text{وتر} = 8$$

⑤

$$4^2 + x^2 = 8^2 \rightarrow 16 + x^2 = 64 \rightarrow x^2 = 64 - 16 = 48 \rightarrow \sqrt{48} = 4\sqrt{3}$$

$$12 + 4 + 12 + 4\sqrt{3} = 32 + 4\sqrt{3}$$



$$\cos 40^\circ = \frac{1}{2} = \frac{AB}{AC} \rightarrow AB = 5$$

$$5^2 + x^2 = 10^2 \rightarrow x^2 = 75 \rightarrow 5\sqrt{3}$$

$$\tan 40^\circ = 1 \rightarrow BC = 5$$

$$5\sqrt{3} - 5 = 5(\sqrt{3} - 1) = 5 \times \frac{1}{2} \approx 2.5$$

①

④

الف، دوم رسوم - سوم و چهارم ← سوم

ب، ناهید دم

$$\tan \alpha = \frac{\sin \alpha}{\cos \alpha} = \frac{1}{3}$$

انتظار است سوم یعنی سینوس و کسینوس منفی

$$\text{ضلع} = \sqrt{-3k^2 + -1k^2} = \sqrt{1 \cdot k^2} \rightarrow \sqrt{1} \cdot k$$



$$\sin = \frac{\text{قابل}}{\text{وتر}} = \frac{-1k}{\sqrt{1} \cdot k} = \frac{-\sqrt{1}}{1}$$

①