

آزمایش کبیری کرده هم نتجسته

الف) $27 \times \frac{\pi}{180} = \frac{3\pi}{20} \text{ rad}$

ج) $\frac{5\pi}{12} \times \frac{180}{\pi} = 75^\circ$

ب) $125 \times \frac{\pi}{180} = \frac{25\pi}{36} \text{ rad}$

د) $\frac{4\pi}{9} \times \frac{180}{\pi} = 80^\circ$

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2- $\frac{125a}{9} = \frac{D}{180} \rightarrow D = \frac{125a}{9} \times \frac{180}{1} = 12,5a$

$\frac{a\pi}{180} \times \frac{180}{\pi} = 12,5a$

$10a + 12,5a + 12,5a = 180 \rightarrow a = 4$

الف) $\frac{1}{2} \times \frac{\sqrt{3}}{2} - \frac{\sqrt{3}}{2} \times \frac{1}{2} - 1 + 2 = 1$

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ب) $\frac{\frac{1}{2} + 1 + 3}{\sqrt{2} - \frac{\sqrt{2}}{2}} = \frac{\frac{13}{2}}{\frac{\sqrt{2}}{2}} = \frac{13}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{13\sqrt{2}}{2}$

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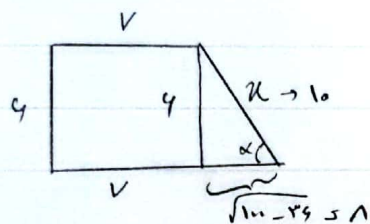
$$-\frac{1}{y} \times \frac{1}{y} + \frac{\sqrt{x}}{y} \times \frac{\sqrt{x}}{y} = \frac{1}{y} = \sin \theta \quad -\text{ر}$$

$$\rightarrow \sin \theta = \pm \frac{\sqrt{x}}{y} \rightarrow \theta = 45^\circ, 135^\circ \text{ or } 0.785 \rightarrow \theta = 45^\circ \quad (\tan \theta = 1)$$

$$\frac{\frac{\sqrt{x}}{y} (1 - \frac{1}{y})}{(1 - \frac{1}{y})^2} = \frac{\frac{\sqrt{x}}{y}}{\frac{1}{y}} = \sqrt{x} = \tan \theta \quad -\text{د}$$

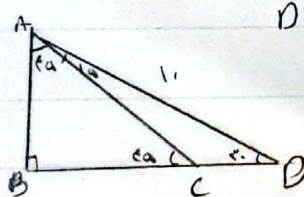
$$\rightarrow \theta = 45^\circ, 135^\circ \text{ or } 0.785 \rightarrow \theta = 45^\circ \rightarrow \theta = \frac{\pi}{4} \text{ rad}$$

$$\xrightarrow{\text{جیب ثانی}} \frac{y \tan \theta - 1}{\tan \theta - y} = \frac{12 - 1}{2 - 1} = 11 \quad -\text{س}$$



$$\sin \alpha = \frac{4}{x} = \frac{4}{11} \rightarrow x = 11$$

$$\text{مساحت} = 4 + 4 + 4 + 1 + 1 = 14 \quad -\text{ص}$$



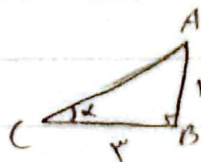
$$\hat{D} = 11, (4 + 4) = 8$$

$$\sin \alpha = \frac{AB}{AD} = \frac{1}{2} \rightarrow AB = 1$$

$$\tan \alpha = \frac{AB}{BC} = 1 \rightarrow BC = 1$$

$$\sin \alpha = \frac{BD}{AD} = \frac{\sqrt{2}}{2} \rightarrow BD = \sqrt{2} \quad DC = \sqrt{2} - 1 \quad (\text{or } \sqrt{2} - 1)$$

۹- الف) تابع دوم ب) تابع اول



$$AC = \sqrt{1+1} = \sqrt{2}$$

$$\sin \alpha = \left(\frac{1}{\sqrt{2}} \right) \rightarrow \text{شیب دایره اول است}$$