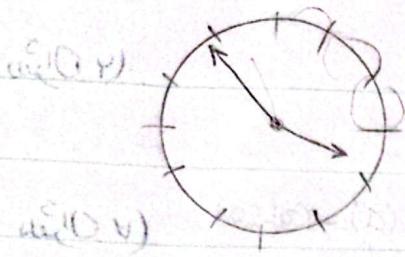


$2\pi\omega$
 $uv\omega = 45.0\sqrt{r}$



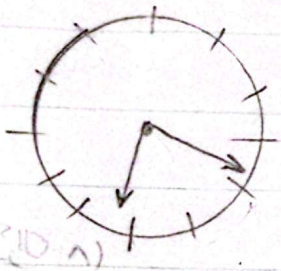
$K \times 10 = 110$

$\omega K = 1 = 1V$

فرض حاجی امیر
 $110 + 2V + 4 = 152$ (سوال ۱)

$b = |1515M - 10H| = |1515 \times \frac{1}{\omega} - 10(10)| = 20V \Rightarrow 1540 - 100 = 1540$

(سوال ۲)



$K \times 10 = 90$

$1A = 1 = 9$

$K \times 9 = 12$

$\left. \begin{array}{l} K \times 10 = 90 \\ 1A = 1 = 9 \\ K \times 9 = 12 \end{array} \right\} + 11$

ب) $|1515M - 10H|$

$|1515 \times 11 - 10 \times 9| = |-11|$

$\Rightarrow 11$

$S = \frac{q}{r} R^2 = \frac{2\pi \times 1}{4} \times \frac{1}{r} \times \frac{1}{r} = \frac{152}{r}$

$P = Pr + QR = \frac{1}{4} + \frac{\pi}{4} \times 10 = 4 + \frac{\pi}{4}$ (سوال ۳)

$S = \frac{1}{r} \times ab \times ac \times \sin A = \frac{1}{r} \times \omega \times \frac{1}{r} \times \frac{1}{r} = 1015$

(سوال ۴)

ب) $a = \sqrt{b^2 + c^2 - 2bc \cos A} = \sqrt{4K + 2\omega - 10 \times \frac{1}{r}} = \sqrt{19} = 3$

$p = v + \omega + 1 = 10 \text{ cm}$

سوال ۵
 $\frac{10\sqrt{r}}{\sin B} = \frac{10}{\sin A} = \frac{c}{\sin e} = \frac{10\sqrt{r}}{\sin B} = \frac{10}{\frac{1}{r}} = \frac{10\sqrt{r}}{\sin B} = \frac{10}{1} \Rightarrow \sin B = \frac{10\sqrt{r}}{10} = \frac{\sqrt{r}}{r}$

$\Rightarrow \sin B = \frac{\sqrt{r}}{r} \Rightarrow B = 45^\circ \Rightarrow C = 105^\circ \Rightarrow B = \frac{\pi}{4} \text{ و } C = \frac{7\pi}{9}$

$10\omega \times \frac{\pi}{10} =$

$\frac{10\omega \times \pi}{10} =$

$$\frac{-\tan(\alpha) + \tan(\alpha)}{-\tan(\alpha) - \tan(\alpha)} = \frac{\tan(\alpha)}{-\tan(\alpha)} = -1$$

سوال ٤

$$\Rightarrow \tan \alpha = a$$

$$A. \frac{\tan(\frac{\pi}{2} - \alpha) + \tan(\frac{\pi}{2} + \alpha)}{\tan(\frac{\pi}{2} - \alpha) + \tan(\frac{\pi}{2} + \alpha)} = \frac{\cot(\alpha) - \cot(\alpha)}{-\tan(\alpha) - \cot(\alpha)}$$

سوال ٥

$$\frac{\frac{\frac{1}{a}}{\cot(\frac{\pi}{4})}}{\frac{\frac{1}{a} - \frac{1}{a}}{a}} = \frac{1}{-1}$$

$$\div \cos m \rightarrow \frac{\tan m + 1}{\tan m - 1} + \frac{\tan m - 1}{\tan m + 1} = k$$

سوال ٨

$$\frac{(\tan m + 1)(\tan m + 1) + (\tan m - 1)(\tan m - 1)}{(\tan m - 1)(\tan m + 1)} = \frac{\tan^2 m + 1 + \tan^2 m + 1 - 2\tan m}{\tan^2 m - 1}$$

$$\frac{k \tan^2 m + 1}{\tan^2 m - 1} = k \Rightarrow k \tan^2 m - k = k \tan^2 m + 1 \Rightarrow \tan^2 m = \frac{1}{2} \Rightarrow \tan m = \pm \frac{1}{\sqrt{2}}$$

$$\div \cos^2 \rightarrow \frac{\tan^2 m - k \tan^2 m + 1}{\tan^2 m + 1 - (k \tan^2 m + 1)} = \frac{\tan^2 m + \tan^2 m - 1}{1} = k \Rightarrow k \tan^2 m - 1 = k \Rightarrow k \tan^2 m = 1 \Rightarrow \tan^2 m = \frac{1}{k}$$

سوال ١٠

$$الف) \cos^2 \alpha = \cos^2 \alpha - \sin^2 \alpha \Rightarrow \cos^2 \alpha = \cos^2 \alpha - \sin^2 \alpha$$

$$\frac{\sqrt{r}}{r} \Rightarrow \cos^2 \alpha - \sin^2 \alpha$$

$$1 \Rightarrow \cos^2 \alpha + \sin^2 \alpha$$

$$ب) \sin(4\alpha) = \cos(\pi/2 - 4\alpha) \Rightarrow \cos(\pi/2 - 4\alpha) \text{ ان } \pi/2 - 4\alpha \text{ را حساب کن}$$

$$\Rightarrow \frac{\sqrt{r+1}}{r}$$

$$\frac{\sqrt{r+1}}{r} \Rightarrow \cos \alpha = \frac{\sqrt{r+1}}{r}$$