

$$10:00 + 90 + 120 = 210$$

1. سید اریست

الف

4

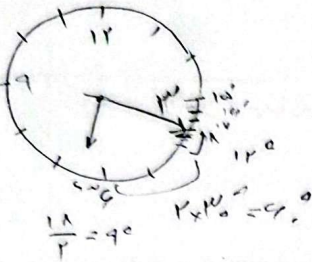
$$|\omega, \omega_m - P_0 h| = \omega, \omega(\omega_f) - 90 = 20.7$$

ب

2

الف

ب



$$90 + 9 + 12 = 111$$

$$\left| \omega, \omega(11) - P_0 \times 12 \right| = 111$$

$$\text{شماره} = \frac{S}{T} R^2 = \frac{E}{R} \times \frac{1}{T} = \frac{E R}{T}$$

$$\text{شماره} = \omega R = R \times \frac{E}{S} = \frac{E}{T}$$

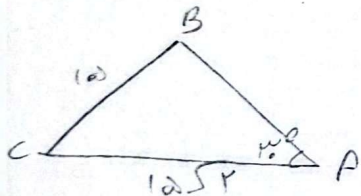
3

$$\text{شماره} = 1 \times \omega \times \sin 90^\circ = E \times \frac{R}{T} = R \times \frac{E}{T}$$

4. الف

$$P \cdot S \cdot P = P(P-1)(P-\omega)(P-3C)$$

ب



5

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

6

$$\frac{\tan(45^\circ - 10^\circ) + \tan(45^\circ + 10^\circ)}{r \tan(110^\circ - 10^\circ) - \tan(170^\circ - 10^\circ)} = \frac{\cot(10^\circ) + \cot(10^\circ)}{0}$$

7. الف

$$\frac{(\sin^2 \alpha + \cos^2 \alpha)^r + (\sin^2 \alpha - \cos^2 \alpha)^r}{\sin^2 \alpha - \cos^2 \alpha} = \frac{r(\sin^2 \alpha + \cos^2 \alpha)}{1 - \cos^2 \alpha} = \frac{r}{1}$$

8

$$1 - \cos^2 \alpha = \frac{r}{r} \\ - \cos^2 \alpha = -\frac{1}{r}$$

$$\tan^2 \alpha = \frac{\sin^2 \alpha}{\cos^2 \alpha} = \frac{\frac{1}{4}}{\frac{1}{4}} = 1 \Rightarrow \cos^2 \alpha = \frac{1}{4} \\ \sin^2 \alpha = \frac{3}{4}$$

$$\frac{1 - \cos \varphi_m}{\sin \varphi_m + \cos \varphi_m} = r$$

$$\frac{r - r \cos \varphi_m}{\cos \varphi_m} = \frac{r}{1}$$

$$r - r \cos \varphi_m = r \cos \varphi_m$$

$$\cos \varphi_m = \frac{\frac{\omega}{V}}{\frac{1}{V}} = \frac{\omega}{r} = \varphi_m$$

$$r = V \cos \varphi_m$$

$$\cos \varphi_m = \frac{r}{V}$$

$$\sin \varphi_m = \frac{\omega}{V}$$

$$\cos(r, \omega) = \sin(\varphi_m, \omega)$$

$$\cos \frac{\theta}{r} = \pm \sqrt{\frac{1 + \cos \theta}{r}}$$

$$r, \omega \times r = F \omega^2$$

$$\cos r, \omega = \sqrt{\frac{1 + \cos \theta}{r}}$$

$$\cos r, \omega = \sqrt{\frac{1 + \frac{r}{r}}{r}} = \sqrt{\frac{r + r}{r}}$$