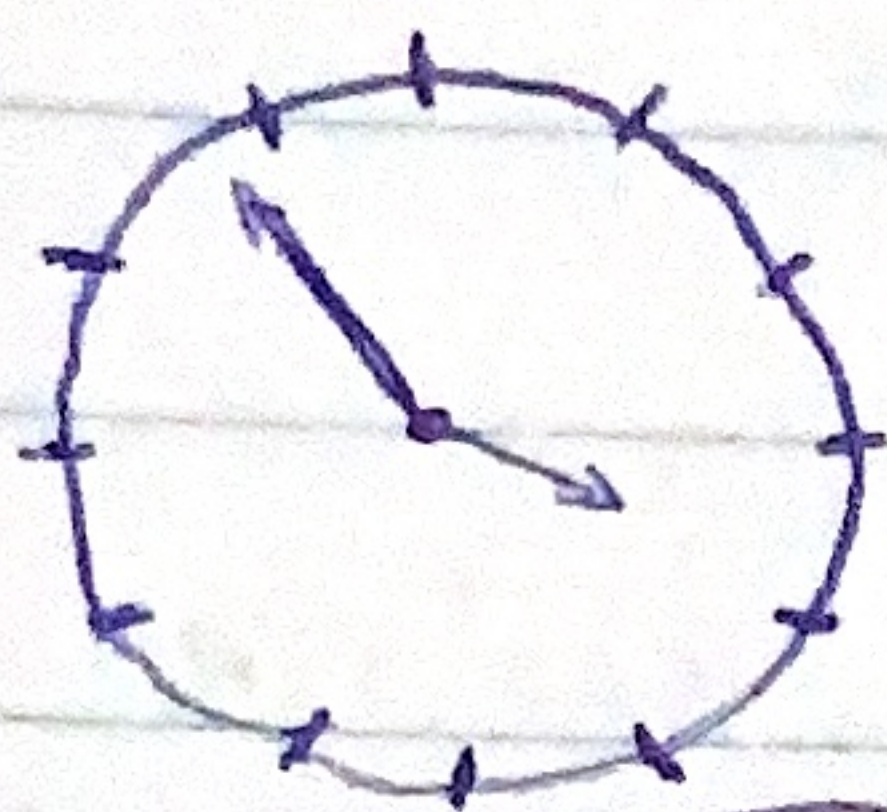
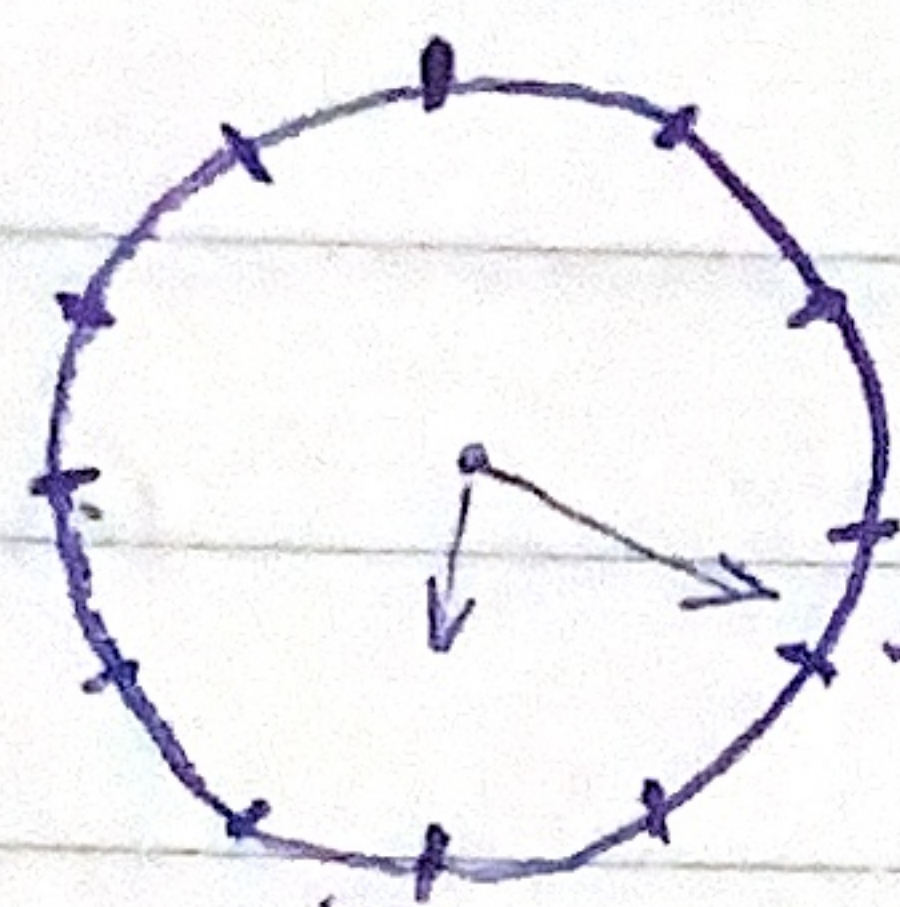


$$10, 10 \text{ m} - r.h \rightarrow 24V - 4. = 20V \quad 240 - 20V = 18 \quad \checkmark$$



$$r_0 \times r = 9. \quad 4. + 4(9) = 124 \quad \frac{24}{r} = 2V \quad 124 + 2V = 18 \quad \checkmark$$

$$40 - 18 + 9 = 11 \quad \checkmark$$



$$|8, 8 \text{ m} - r.h| = |99 - 18.1| = 11 \quad \checkmark$$

$$\text{الف)} \quad 9 \frac{\pi}{12} = \frac{3\pi}{4} \quad \frac{\pi}{4} \times r^2 = \frac{9\pi}{12} \quad \checkmark \quad \leftarrow \text{مساحت}$$

$$\rightarrow) \quad r \times \frac{\pi}{4} = \frac{\pi}{2} \quad \frac{\pi}{2} + r \times r = \frac{\pi}{2} + 9 \quad \checkmark \quad \leftarrow \text{مس}$$

$$BC = \sqrt{AB^2 + AC^2 - 2AB \times AC \cos \alpha}$$

$$\left\{ \frac{1}{r} \times 8 \times 18 \times \frac{\sqrt{2}}{2} = 2 \times \frac{\sqrt{2}}{2} = 1.41 \quad \checkmark \quad \text{الف)} \right.$$

$$\Rightarrow BC = \sqrt{28 + 99 - \frac{100}{r}} = \sqrt{49} = 7 \quad \checkmark$$

$$7 + 18 + 8 = 20 \quad \checkmark$$

$$\frac{10}{\sin 50} = \frac{10}{1} = r_0 = \frac{10\sqrt{2}}{\sin B} \Rightarrow \sin B = \frac{10\sqrt{2}}{r_0} = \frac{\sqrt{2}}{2}$$

$$\frac{50}{18} = \frac{\text{Rad}}{\pi} = \left(\frac{\pi}{4} \right) \quad \checkmark$$

چون حاد است $\Rightarrow 50$

$$1.80 - 50 = 1.8$$

$$\frac{1.8}{18} = \frac{21\pi}{34} = \left(\frac{15\pi}{12} \right) \quad \checkmark$$

$$\frac{-\tan \alpha + r \tan \alpha}{- \tan \alpha - \tan \alpha} = \frac{-\tan \alpha}{- \tan \alpha} = -1 \quad \checkmark$$

$$\frac{-\tan \alpha}{- \tan \alpha} = -1 \quad \checkmark$$

Subject .

$$\frac{\cot 10^\circ}{-r \tan 10^\circ - \cot 10^\circ} = \frac{\frac{1}{a}}{-\frac{1}{a} - \frac{1}{a}} = \frac{-1}{\frac{1}{a} + 1}$$

Month.

Day.

$$\frac{1}{r} = \frac{1}{10} \quad \frac{\pi}{r} = 10^\circ \quad \frac{r \tan(\frac{\pi}{r} - \alpha) + \tan(\frac{\pi}{r} + \alpha)}{r \tan(\pi - \alpha) - \tan(\frac{\pi}{r} - \alpha) - \cot r} \quad (V)$$

115

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

$$\frac{\cot}{-\frac{r}{\cot} - \cot} = \frac{\cot}{-r - \cot} \Rightarrow \frac{-\cot}{r \tan + \cot}$$

$$\frac{\sin + \cos}{\sin - \cos} + \frac{\sin - \cos}{\sin + \cos} = \frac{(\sin + \cos)^2 + (\sin - \cos)^2}{\sin^2 - \cos^2} \quad (A)$$

$$= \frac{\sin^2 + \cos^2 + r \sin \cos + \sin^2 + \cos^2 - r \sin \cos}{\sin^2 - \cos^2} \quad \sin^2 + \cos^2 + \sin^2 + \cos^2 = 2$$

$$\cos^2 = 1 - \sin^2 \quad \tan^2 = \frac{\sin^2}{\cos^2} = \frac{\frac{8}{9}}{\frac{1}{9}} = 8 \quad \checkmark$$

Y

$$\frac{r}{\sin^2 - \cos^2} = r \quad \frac{r}{\sin^2 - 1 + \sin^2} = \frac{r}{r \sin^2 - 1} = r \Rightarrow 4 \sin^2 - r = r \Rightarrow 4 \sin^2 = 8$$

$$\Rightarrow \sin^2 = \frac{8}{4} = 2 \quad \cos^2 = \frac{1}{4}$$

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

Y

$$r - r \sin^2 = r \sin^2 - 1 \Rightarrow 8 = 4 \sin^2 \Rightarrow \sin^2 = \frac{8}{4} = 2 \quad \cos^2 = \frac{1}{4} \quad \tan^2 = \frac{\sin^2}{\cos^2} = \frac{8}{\frac{1}{4}} = 32 \quad \checkmark$$

$$\cos^2 = \frac{1}{4} \Rightarrow 1 + \cos^2 = \frac{5}{4} \Rightarrow \frac{1 + \frac{\sqrt{r}}{r}}{r} = \frac{r + \sqrt{r}}{r^2} \Rightarrow \cos(r, \theta) = \frac{r + \sqrt{r}}{r^2} \quad \checkmark$$

$$\sin^2 = 4 \Rightarrow 1 - \cos^2 = 3 \Rightarrow \frac{1 - (-\frac{\sqrt{r}}{r})}{r} = \frac{1 + \frac{\sqrt{r}}{r}}{r} = \frac{r + \sqrt{r}}{r^2} \quad \checkmark$$

$$\Rightarrow \sin 4\theta = \frac{r + \sqrt{r}}{r^2} \quad \checkmark$$

ARSH