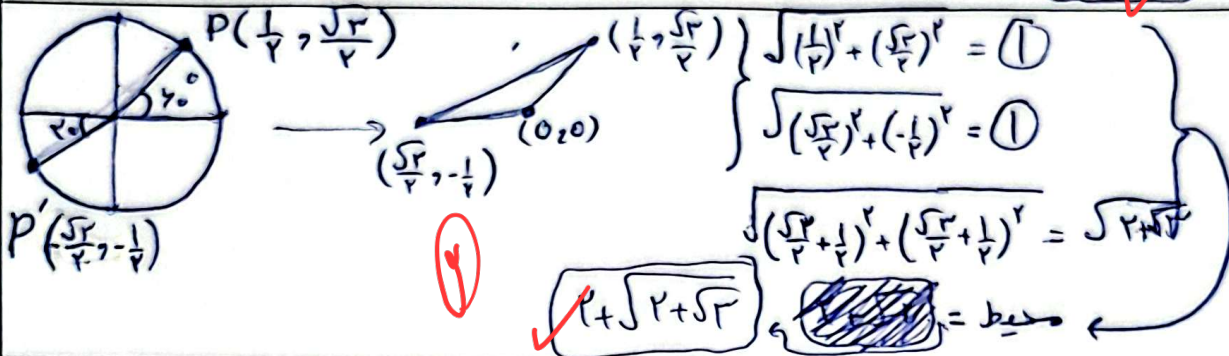
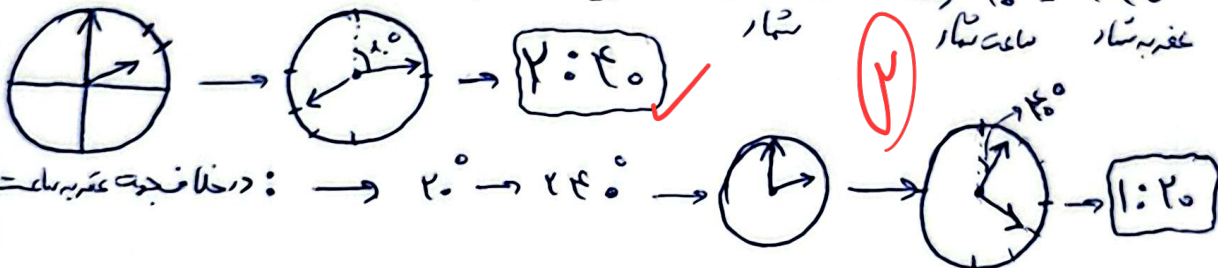


$$-\frac{\sqrt{r}}{r} = \frac{-\frac{\sqrt{r}a}{r} - \frac{\sqrt{r}b}{r}}{-\frac{a}{r} + \frac{b}{r}} \rightarrow -\frac{\sqrt{r}}{r} = \frac{-\frac{\sqrt{r}}{r}(a+b)}{\frac{1}{r}(b-a)} \rightarrow +\frac{1}{r} = \frac{a+b}{b-a}$$

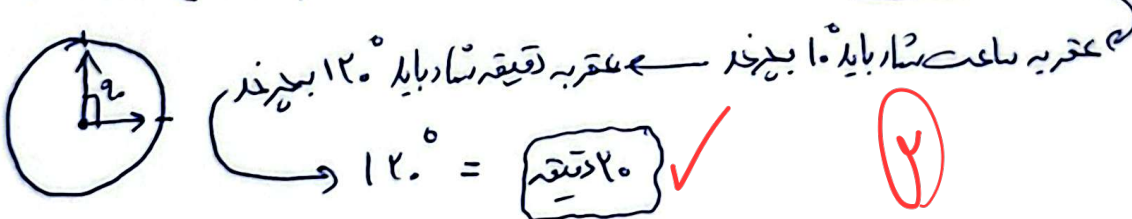
$$-\frac{a}{r} + \frac{b}{r} = a + b \rightarrow +\frac{rb}{r} = -\frac{ra}{r} \rightarrow +b = -a \rightarrow \boxed{\frac{b}{a} = -1}$$



درجه عقرب ساعت : $۲۴^{\circ} = ۲^{\circ}$ $\rightarrow$ درجه عقرب دقیقه = هر یک درجه عقرب ساعت شمار



$$12x - (x + 90) = 20^\circ \rightarrow 11x = 110^\circ \rightarrow x = 10^\circ$$



$$-\frac{\pi}{2} < x \leq \frac{\pi}{2} \rightarrow -\frac{1}{2} < x \leq \frac{1}{2} \rightarrow \sin x \in (-\frac{1}{2}, 1]$$

$$\frac{m-r}{d} \in (-\frac{1}{r}, 1] \rightarrow m-r \in (-r, d, d] \rightarrow m \in (\frac{1}{r}, 1]$$

$\cos \theta$

$\sin \theta$

$1 - k \tan \theta$

$= r \rightarrow 1 - \frac{k}{r} = -\frac{r}{r} \rightarrow \frac{k}{r} = \frac{r}{r}$

$$\frac{\sin \theta - k \cos \theta}{-\cos \theta - r \sin \theta} = r \rightarrow \sin \theta - k \cos \theta = -r \cos \theta - r^2 \sin \theta$$

$k = r^2$

$$r \sin \theta = (k - r) \cos \theta \rightarrow \tan \theta = \frac{k - r}{r} \rightarrow \frac{1}{r} = \frac{k - r}{r}$$

$$r = k - r \rightarrow k = 19 \rightarrow k = \frac{19}{r}$$

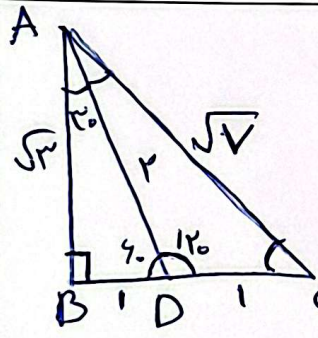
$$1 - \cos x = r + r \cos x \rightarrow \cos x = -\frac{1}{r}$$

$$\frac{\cot x + \cot x}{\tan x - \tan x} = \frac{r \cot x}{-\tan x} \rightarrow -r \frac{\cos^2}{\sin^2} = -r \frac{1}{\frac{1}{9}} = -\frac{1}{r}$$

$$\frac{I_0 A}{I_0} = \frac{R}{r} \rightarrow \frac{r}{1}$$

$$\frac{r}{1} \times R_A = \frac{9}{10} \times R_B \rightarrow \frac{R_A}{R_B} = \frac{\frac{9}{10}}{\frac{r}{1}} = \frac{r}{10}$$

$$\frac{\delta A}{\delta B} = \frac{R_A}{R_B} \rightarrow \frac{R_A}{R_B} = \frac{(\frac{9}{10} R_B)}{R_B} = \frac{9}{10}$$



$$\sin \theta = \frac{1}{r} = \frac{1}{AD} \rightarrow AD = r$$

$$\tan \theta = \frac{1}{\sqrt{r}} = \frac{1}{AB} \rightarrow AB = \sqrt{r}$$

$$\delta_{ABC} = \sqrt{r} = \frac{BC \times \sqrt{r}}{r} \rightarrow BC = r \rightarrow DC = 1$$

$$\sin C = \frac{\sqrt{r}}{\sqrt{r}}, \cos C = \frac{r}{\sqrt{r}} \rightarrow \sin \theta = r \sin \alpha \cos \alpha$$

~~$\sin \theta = \frac{1}{r} = \frac{1}{AD}$~~

$$r \times r = 9 \rightarrow r = 3$$

$$\frac{1}{r} \times \sqrt{r} \times \sqrt{r} \times \sin \theta = \frac{1}{r} \rightarrow \sin \theta = \frac{1}{r}$$