

زمره بندی پرو ۸۰ - سری ۱۹



$$4 \times 20 + 9 + 2V = 102$$

الف

$$1 - 2:54'$$

$$\left| \frac{102}{20} \times \frac{2V}{20} - 20 \times 2 \right| = 20V$$

ب



$$4 \times 20 + 12 + 9 = 11$$

الف

$$2 - 4:18$$

$$\left| \left( \frac{102}{20} \times \frac{12}{12} \right) - (20 \times 4) \right| = 11$$

ب

$$S = \frac{1}{2} R^2 = \frac{\pi}{250} \times 9^2 = \frac{2\pi}{5}$$

الف

$$P = \alpha R + 2R = \frac{\pi}{250} \times 2 + 2 \times 2 = 4 + \frac{\pi}{125}$$

ب

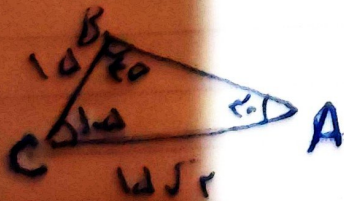
$$S = \frac{1}{2} \times \Delta \times \frac{\sqrt{3}}{2} = 10\sqrt{3}$$

الف

$$CB = \frac{\sqrt{2 \times 4 + 4 \times 2 - 2 \times 2 \times 2 \times \frac{1}{2}}}{\sqrt{4 - 2}} = \sqrt{4} = 2$$

ب

$$V + \Delta + \Lambda = 20$$



$$\frac{10}{\frac{1}{2}} = \frac{10\sqrt{2}}{x} \rightarrow 10\sqrt{2} \times \frac{1}{\frac{1}{2}} = \frac{\sqrt{2}}{x}$$

$$\sin B = \frac{\sqrt{2}}{2} \rightarrow \hat{B} = 45^\circ \rightarrow \hat{C} = 90^\circ$$

ب

$$\frac{-\tan \alpha + 2 \tan \alpha}{-\tan \alpha - \tan \alpha} = \frac{2 \tan \alpha}{-2 \tan \alpha} = -1$$

$$\frac{\pi}{18} \times \frac{1}{\pi} \times 10^\circ \quad \tan 10^\circ \approx a$$

-V

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

$$\tan \frac{1}{a} \rightarrow a \rightarrow \cot \frac{1}{a} \rightarrow \frac{1}{a} \rightarrow \frac{1}{-ra - \frac{1}{a}} = \frac{-1}{ra^2 + 1}$$

$$\sin + \cos \left( \frac{\sin x + \cos x}{\sin x - \cos x} + \frac{(\sin x - \cos x) \sin - \cos}{\sin x + \cos x} \right)$$

-A

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

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

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

$$\frac{r \sin^2 - 1}{1 - \sin^2} = \frac{r \sin^2 - 1}{r \sin^2 - 1} = 1$$

-9

$$\tan^2 = \frac{d}{v} \approx \frac{d}{r} \approx \frac{d}{r}$$

$$v \sin^2 \approx \sin^2 \approx \frac{d}{v} \approx \cos^2 \approx \frac{d}{v}$$

الف)  $\cos^2 \approx \frac{1 + \cos^2 \alpha}{2} = \frac{\cos^2 \alpha + 1}{2} = \frac{1 + \cos^2 \alpha}{2}$

ب)  $\sin^2 \approx \frac{1 - \cos^2 \alpha}{2} = \frac{1 - \cos^2 \alpha}{2}$