

یاد رکھو

مسئلہ

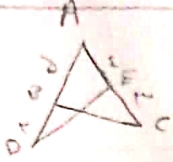
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امیر محمد فروزان

$S = x \frac{1}{r} \sin 100^\circ + r \sin 100^\circ \rightarrow r \sin 100^\circ = 1 \rightarrow r = \frac{1}{\sin 100^\circ} \rightarrow u = \sqrt{1}$

(۲)

$r \rightarrow 2 \sin 100^\circ \rightarrow 2 \sin 100^\circ + 4 \sin 100^\circ \rightarrow 10 \sin 100^\circ \rightarrow 10 \sin 100^\circ \checkmark$



$S_{ADE} = \frac{1}{2} \sin A \times x \times y = \frac{1}{2} \sin A \times \frac{1}{r} \times \frac{1}{r} \times \frac{1}{r} = \frac{1}{2r^3} \sin A$

(۲)

$\sin A (1/r^3 - 1/r^3) = 1/r^3 \rightarrow r^3 \sin A = 1/r^3 \rightarrow \sin A = \frac{1}{r^6} \rightarrow A = \sin^{-1} \left(\frac{1}{r^6} \right)$
 $\frac{1}{r^6} \rightarrow \frac{1}{r^6} \rightarrow \frac{1}{r^6} \checkmark$

$\frac{1}{\sec a} - \tan a = \frac{1 + \sin a}{|\cos a|} \quad \frac{|\sin a|}{\cos a} = -\frac{1}{\cot a}$

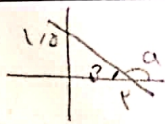


$\frac{1}{|\cos a|} - \frac{\sin a}{\cos a} = \frac{1 + \sin a}{|\cos a|} \rightarrow \cos a < 0$

$\frac{|\sin a|}{\cos a} = -\frac{\sin a}{\cos a} \rightarrow \sin a < 0$

(۲)

$\tan \left(\frac{\pi}{2} - a \right) \rightarrow \cot a$

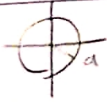


$\cot B = \frac{p}{q} \rightarrow \frac{p}{q} \rightarrow \cot a = -\frac{q}{p} \checkmark$

(۲)

$\frac{r \cos(\frac{\pi}{2} - a) - r \sin(\frac{\pi}{2} - a)}{\sin(\frac{\pi}{2} - a) - \cos(\frac{\pi}{2} - a)} \rightarrow \frac{r \cos(\frac{\pi}{2} - a) - r \sin(\frac{\pi}{2} - a)}{\sin(\frac{\pi}{2} - a) - \cos(\frac{\pi}{2} - a)} \rightarrow \frac{-r \sin a - r \cos a}{\cos a - \sin a}$

(۲)



$\cos a = \frac{p}{r} \quad \frac{\sin(\frac{\pi}{2} + a) - \sin(a - \frac{\pi}{2})}{|1 + \tan a - 1|} = \cos a$

$\sin^2 a + \cos^2 a = 1$
 $\sin^2 a = \frac{d}{a} \rightarrow \sin a = \frac{\sqrt{d}}{a}$

(۲)

$\rightarrow \frac{\cos a + \sin a}{1} = \frac{p - \sqrt{d} \times \frac{1}{a} - \frac{1}{a} \sqrt{d}}{1}$

$\sin a = r \cos a$



$r \cos^2 a + \cos^2 a = 1 \rightarrow \partial \cos^2 a = 1 \rightarrow \cos^2 a = \frac{1}{r} \rightarrow \cos a = \frac{1}{\sqrt{r}}$

$\frac{-\sqrt{d}}{d} \checkmark$


(۲)

$m^2 x + (m^2 - 1)y = r \quad \tan \theta = \frac{\sqrt{r}}{r} \times r = \sqrt{r}$

(۲)

$m^2 x + (m^2 - 1)y - r = 0$
 $\frac{-a}{b} = \frac{-r}{m^2 - 1} = \sqrt{r} \rightarrow m^2 = \frac{r}{\sqrt{r}} = \sqrt{r}$
 $\frac{-r \pm \sqrt{r^2 - 4 \times \frac{1}{\sqrt{r}} \times (-r)}}{2 \times \frac{1}{\sqrt{r}}} = \frac{-r \pm \sqrt{r^2 + 4r}}{2/\sqrt{r}} = \frac{-r \pm \sqrt{r(r+4)}}{2/\sqrt{r}}$
 $\frac{-r \pm \sqrt{r(r+4)}}{2/\sqrt{r}} = \frac{-r \pm \sqrt{r(r+4)}}{2/\sqrt{r}} = \frac{-r \pm \sqrt{r(r+4)}}{2/\sqrt{r}} \checkmark$

پہلے دو سوالات

$\frac{1}{3} < u < \frac{1}{2}$  $\tan\left(\frac{1}{2} - u\right) = \frac{1-m}{p+m}$

$\tan\left(\frac{1}{2} - u\right) = -\tan u$

(2)

$\frac{1-m}{p+m} > 0 \rightarrow \frac{-p}{-1+1} = -1 \rightarrow (-1, 1)$ ✓

$\tan(\pi_0) \cos(\pi_0) + \tan(\pi_0) \sin(\pi_0)$

$\frac{1}{\pi_0} \cdot \frac{1}{\pi_0}$

$\frac{\Delta \pi_0 \pi_0}{\pi_0} = (2)$

$-\sqrt{x} - \frac{\sqrt{x}}{p} + -\sqrt{x} \times \frac{\sqrt{x}}{p}$

$-\sqrt{x} \left(-\frac{\sqrt{x}}{p} + \frac{\sqrt{x}}{p} \right) = 0$ ✓