

Subject:

تکلیف شنبه ۱۴

Year:

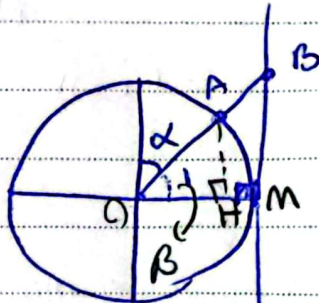
Month:

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۱۹، ۷۵ ~ آفرین !!

مهندسی

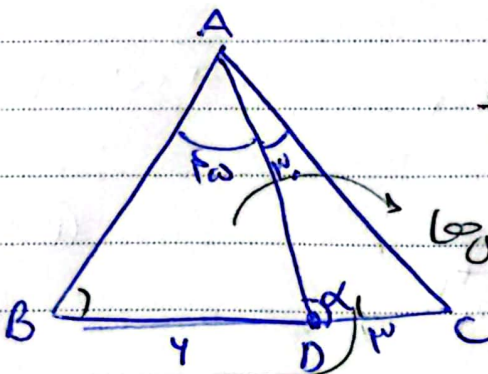


$$AH \parallel BM \rightarrow \frac{OA}{OB} = \frac{OA}{OM} \quad \frac{OM=1}{OA=1} \rightarrow$$

$$y = \tan \alpha \rightarrow OB = \frac{1}{\cos \beta}$$

$$OB = \frac{1}{\cos \beta} \quad \alpha + \beta = 90^\circ \rightarrow \cos \beta = \sin \alpha \rightarrow OB = \frac{1}{\sin \alpha}$$

$$AB = OB - OA \rightarrow \frac{1}{\sin \alpha} - 1 \rightarrow \frac{1 - \sin \alpha}{\sin \alpha}$$



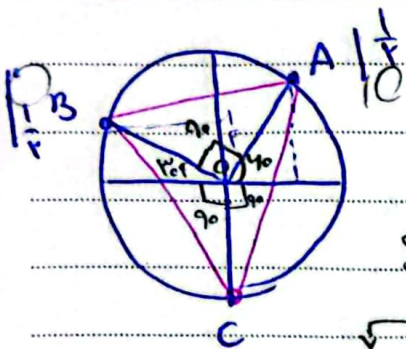
$$\frac{AB}{AC} = ?$$

$$\cos \theta = \frac{AD}{AC} \Rightarrow \frac{AD}{AC} = \frac{AD}{\sin \beta} = \frac{AD}{\sqrt{1 - \sin^2 \beta}} \Rightarrow AD = \sqrt{1 - \sin^2 \beta} \sin \beta$$

$$\frac{AD}{\sin \theta} = y = \frac{AD}{\sin \gamma} \rightarrow AD = y \sin \gamma$$

$$\textcircled{1}, \textcircled{2} \Rightarrow y \sin \gamma = \sqrt{1 - \sin^2 \beta} \sin \beta \rightarrow \sin \gamma = \sqrt{1 - \sin^2 \beta} \sin \beta$$

$$\frac{AB}{AC} = \frac{AC}{\sin \beta} \rightarrow AB = \sqrt{1 - \sin^2 \beta} AC \Rightarrow \frac{AB}{AC} = \sqrt{1 - \sin^2 \beta}$$



$$\cos A = \frac{1}{2} \rightarrow A = 60^\circ$$

$$\sin B = \frac{1}{2} \rightarrow B = 120^\circ$$

$$S_{ABC} = S_{AOC} + S_{BOA} + S_{BOC}$$

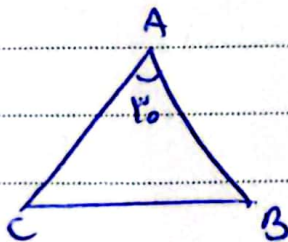
$$\Rightarrow \frac{1}{p} + \frac{1}{p} + \frac{1}{p} = \frac{1}{p} + \frac{1}{p} + \frac{1}{p} = \frac{3}{p}$$

نویسند و بسازیم

$$AB^2 = 1 + 1 - 2 \cos(120^\circ) = 3 \rightarrow AB = \sqrt{3}$$

$$BC^2 = 1 + 1 - 2 \cos(60^\circ) = 1 \rightarrow BC = 1$$

$$AC^2 = 1 + 1 - 2 \cos(40^\circ) = 2 - 2 \cos(40^\circ) \rightarrow AC = \sqrt{2 - 2 \cos(40^\circ)}$$



$$AC = \log_{1/p} 14 \quad AB = \log_{1/p} 14$$

$$S_{ABC} = \frac{1}{2} AC \times BC \times \sin 120^\circ$$

$$\frac{1}{2} \times \log_{1/p} 14 \times \log_{1/p} 14 = \frac{1}{2} \times \log_{1/p} 14 \times \log_{1/p} 14 = \frac{1}{2} \times \log_{1/p} 14^2 = \log_{1/p} 14$$

cos x

$$\sin^2 x + \cos^2 x = 1$$

$$1 - \cos^2 x = 1 \rightarrow \cos^2 x = 0$$

$$\sin^2 x = 1$$

$$\cos^2 x + \sin^2 x = 1 \rightarrow \cos^2 x = 1 \rightarrow \cos x = 1$$

$$\cos^2 x + \sin^2 x = 1 \rightarrow \cos^2 x = 1 \rightarrow \cos x = 1$$

Arman

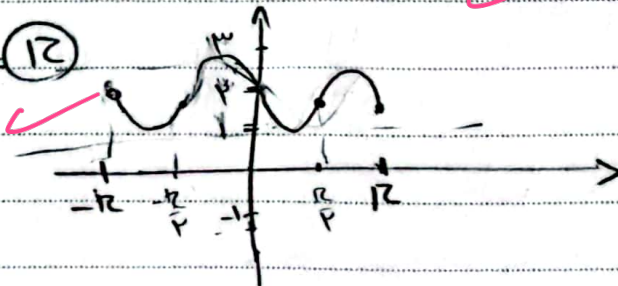
(4)

$$\text{cell } y = -P \sin 2x \cos x + P \quad [-12, 12]$$

$$\hookrightarrow P \sin 2x \cos x = \sin 4x \Rightarrow \sin 4x + P = y$$

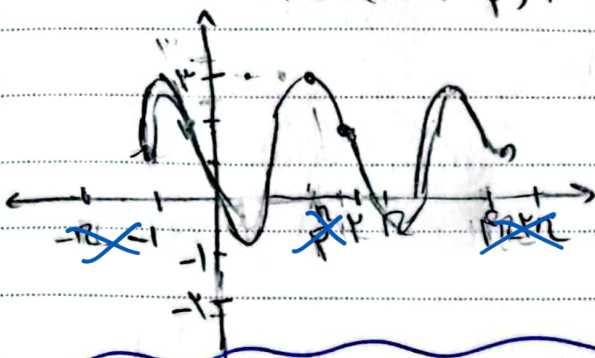
(1, 20)

$$T = \frac{P R}{|b|} \rightarrow \frac{P R}{P} = 12$$



$$\hookrightarrow y = P \cos\left(x + \frac{1}{P}\right) 12 + 1 \quad [-12, 12]$$

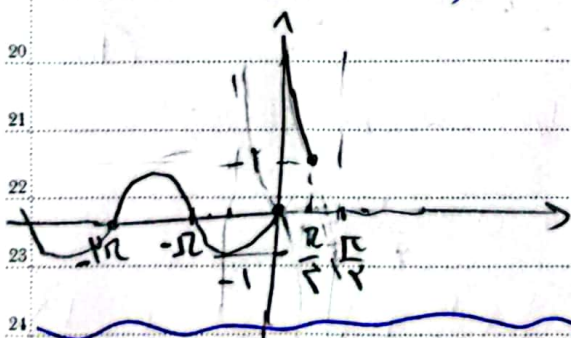
$$\hookrightarrow P \cos\left(x + \frac{1}{P}\right) + 1 \quad T = \frac{P R}{b} = \frac{P R}{12} = 1$$



نقطه های پایانی را داشته باشند!

(5)

$$f(n) = \begin{cases} \cos n & 0 < n < \frac{\pi}{2} \\ \sin n & n \leq 0 \end{cases}$$



$$R_{f(n)} = [-1, 1 + \infty)$$

$$f(n) = a + b \sin(cn) \cos(cn) \cos(\pi n)$$

$$\hookrightarrow a + \frac{b}{P} \sin(\pi n) \cos(\pi n)$$

$$\hookrightarrow a + \frac{b}{P} \sin(\pi n)$$

Arman

ادام سوال 8

$$y = a + \frac{b}{x} \sin(x \text{ cm})$$

نقطه در دو حال اول $a = 2$ $c =$
 عرف نقطه در دو حال اول $\frac{b}{x} = 2 \rightarrow b = 1$

$$I = \frac{0.2R}{\omega R} - \frac{12}{10} = \frac{FR}{10} = \frac{PR}{\omega}$$

$$\frac{PR}{0} = \frac{12}{\omega} \rightarrow 0 = \omega \rightarrow FC = \omega \rightarrow \omega = \frac{12}{8}$$

$$\frac{bc}{a} \rightarrow \frac{A \omega \omega}{R} = \omega$$

$$F(x) = a \cosh x + c \quad | \text{tem } 2 \times 1$$

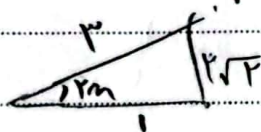
(9)

$$\rightarrow I = R \rightarrow \frac{PR}{|b|} = R \rightarrow b = 2$$

نقطه در دو حال اول $c = -1$ $\leftarrow$
 عرف نقطه در دو حال اول $|a| = 3 \rightarrow a = -3$

$$y = 3 \cosh x - 1 = 0 \rightarrow \cosh x = \frac{1}{3} \quad \sinh x = \frac{\sqrt{2}}{3}$$

$$\tanh x = \frac{\sinh x}{\cosh x} = \frac{\sqrt{2}}{1}$$



$$F(-3, \omega) = (-3 \cosh \omega - 1) + 3 = 1, \omega$$

(10)

$$\rightarrow y = -\frac{1}{p}x + 1 \rightarrow -\frac{1}{p} \times \frac{p}{2} + \frac{6}{p} = \frac{-3}{2} + \frac{6}{2} = \frac{3}{2}$$

(0, 2)