



$$12(120) + 6 + \frac{120}{1} = 1020$$

$$(\omega, \omega m - 120H)$$

$$|\omega, \omega(\omega F) - 120(120)| = 120V$$

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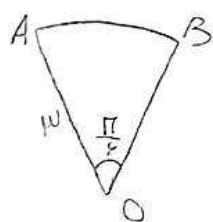


$$6(18) + 12(6) + \frac{18}{1} = 11$$

$$|\omega, \omega(18) - \frac{120}{18}(6)| = 11$$

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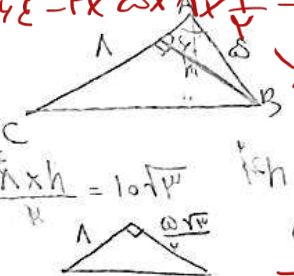
$$S = \frac{\alpha}{2} R^2$$

$$\frac{\pi}{4} \times \frac{1}{2} \times \frac{1}{1} \times \frac{1}{1} = \frac{1}{4}$$

$$\frac{\pi}{4} \times \frac{1}{2} \times \frac{1}{1} \times \frac{1}{1} = \frac{1}{4}$$

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$BC^2 = AB^2 + AC^2 - 2AB \cdot AC \cos 40$

$BC^2 = 100 + 400 - 2 \times 10 \times 20 \times \frac{1}{2} \rightarrow BC = 10$

$\rho = \omega + 1 + 1 = 2 \times 10 \times \sqrt{10}$

$\frac{1}{2} \times AB \times AC \sin 40 = \frac{1}{2} \times 10 \times 20 \times \frac{1}{2} = 50$

$h = \frac{\omega \sqrt{10}}{2}$

$\frac{1}{2} \times 10 \times h = 10 \times \sqrt{10}$

$(\frac{1}{2})^2 + (\frac{\omega \sqrt{10}}{2})^2 = \frac{100}{4} + \frac{100}{4} = \frac{200}{4} = 50$

$\frac{1}{2} + \frac{\omega^2 \times 10}{4} = 50$

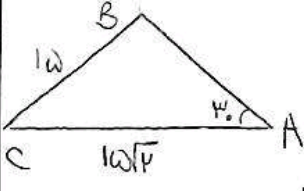
$\frac{\omega^2 \times 10}{4} = 49.5$

$\omega^2 = 19.8$

$\omega = \sqrt{19.8}$

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$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{10}{\sin 40} = \frac{10\sqrt{10}}{\sin B}$$

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

$$\frac{100}{10} = \frac{10\sqrt{10}}{\sin B}$$

$$10 = \frac{10\sqrt{10}}{\sin B}$$

$$\sin B = \frac{\sqrt{10}}{10}$$

$$B = \arcsin(\frac{\sqrt{10}}{10})$$

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

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$$\mu \tan \left(\frac{\pi}{2} - \omega \right) + \tan \left(\frac{\pi}{2} + \omega \right)$$

$$\mu \tan \left(\frac{\pi}{2} - \omega \right) - \tan \left(\frac{\pi}{2} + \omega \right)$$

$$\tan \frac{\pi}{2} = \omega = a$$

$$\cot = \frac{1}{a}$$

$$\frac{\mu \cot \omega + (-\cot \omega)}{-\mu \tan \omega - \cot \omega} = \frac{\cot \omega}{-\mu \tan \omega - \cot \omega}$$

$$\frac{\frac{1}{a}}{-\mu a - \frac{1}{a}} = \frac{\frac{1}{a}}{-\mu a^2 - 1} = -\frac{1}{\mu a^2 + 1}$$

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$$\sin^2 \alpha + \cos^2 \alpha + \mu \cos \alpha + \sin^2 \alpha + \cos^2 \alpha = \mu \sin \alpha \cos \alpha$$

$$\frac{\mu \sin^2 \alpha + \mu \cos^2 \alpha}{\sin^2 \alpha - \cos^2 \alpha} = \mu \frac{\mu \sin^2 \alpha + \mu \cos^2 \alpha}{\sin^2 \alpha - \cos^2 \alpha} = \mu \frac{\mu + \mu \cot^2 \alpha}{1 - \cot^2 \alpha} = \mu$$

$$\mu - \mu \cot^2 \alpha = \mu + \cot^2 \alpha$$

$$\frac{1}{\omega} = \cot^2 \alpha$$

$$\tan^2 \alpha = \omega$$

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$$\frac{\sin^2 \alpha - \cos^2 \alpha}{\sin^2 \alpha + \cos^2 \alpha + (\cos^2 \alpha - 1)} = \mu \frac{\mu \sin^2 \alpha - \cos^2 \alpha}{(\cos^2 \alpha)}$$

$$\frac{\mu \sin^2 \alpha - \cos^2 \alpha}{\cos^2 \alpha} = \frac{\mu \tan^2 \alpha - 1}{1} = \mu$$

$$\mu \tan^2 \alpha = \omega$$

$$\tan^2 \alpha = \frac{\omega}{\mu}$$

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$$\cos(\mu, \omega) \Rightarrow \cos^2 \mu, \omega = \frac{1 + \sqrt{\frac{\omega}{\mu}}}{2}$$

$$\cos^2 \mu, \omega = \frac{1 + \sqrt{\frac{\omega}{\mu}}}{2}$$

$$\cos \mu, \omega = \frac{1 + \sqrt{\frac{\omega}{\mu}}}{2}$$

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

$$\sin(\mu, \omega) \Rightarrow \frac{1 + \sqrt{\frac{\omega}{\mu}}}{2} = \frac{\sqrt{\mu + \omega}}{\sqrt{\mu}}$$

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