

المداد لعموم

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۳۱-

$$\begin{aligned} +q h \mu &= \frac{1}{\frac{1}{\mu}} = \frac{\mu}{\frac{1}{\mu}} = \frac{1 \times \mu}{\frac{1}{\mu}} = \frac{\mu}{\frac{1}{\mu}} = \frac{\mu \times \mu}{1} = \mu^2 \\ +q h \mu &= \frac{1}{\frac{1}{\mu}} = \frac{\mu}{\frac{1}{\mu}} = \frac{1 \times \mu}{\frac{1}{\mu}} = \frac{\mu}{\frac{1}{\mu}} = \frac{\mu \times \mu}{1} = \mu^2 \end{aligned}$$

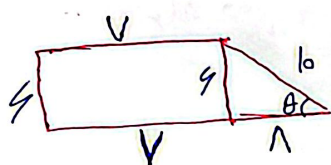
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5

$$\frac{\psi(\Delta \cos) - \cos \eta}{\Delta \cos \eta - \cos \eta} = \frac{|\Delta \cos \eta - \cos \eta|}{\cos \eta} = \frac{|\Delta \cos \eta|}{\cos \eta} = |\Delta|$$



$$\frac{4}{1} = \frac{4}{\cos \theta} \rightarrow \cos \theta = \frac{1}{5}$$

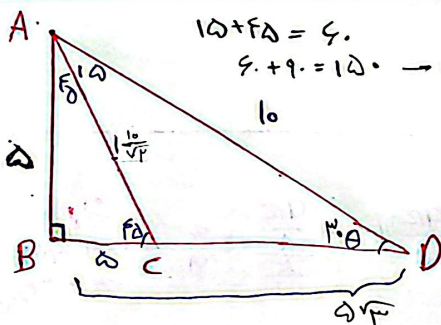
$$5^2 = 4^2 + 1^2$$

$$\sin \theta = \frac{4}{5}$$

-V

$$1 + 4 + 4 + 1 + 1 = 11$$

-A



$$15 + 45 = 60$$

$$6 + 90 = 150 \rightarrow 180 - 150 = \theta = 30^\circ$$

$$\text{زاویه ی روبروی ۳ نصف وتر} \rightarrow AB = 5 \quad BD = 10^2 - 5^2 = \sqrt{75} = 5\sqrt{3}$$

$$AC \Rightarrow \cos \theta = \frac{5}{10} \rightarrow \frac{\sqrt{3}}{2} = \frac{5}{10} \rightarrow \frac{5}{10} = \frac{1}{2}$$

$$BC = \left(\frac{10}{\sqrt{3}}\right)^2 - (5^2) = \frac{100}{3} - 25 = \sqrt{25} = 5$$

$$BD = BC + CD$$

$$5\sqrt{3} - 5 = DC$$

-9

الف) ربع سوم $180^\circ < \theta < 270^\circ$
 ب) ربع دوم $90^\circ < \theta < 180^\circ$

$\sin$ و $\cos$ هر دو مثبت

لکه $\cos$ افزون می آید چون منفی صریح می آید کمانه منفی
 کوچک بیشتر بزرگتر شده $\sin$ کم می شود

$$1 + \tan^2 \theta = \frac{1}{\cos^2 \theta} \rightarrow 1 + \frac{1}{9} = \frac{10}{9} = \cos^2 \theta \Rightarrow \cos \theta = \pm \frac{\sqrt{10}}{3}$$

$$\Rightarrow \cos = -\frac{3\sqrt{10}}{10}$$

$$\rightarrow \sin^2 + \cos^2 = 1 \rightarrow \left(-\frac{3\sqrt{10}}{10}\right)^2 = \frac{90}{100} = \frac{9}{10}$$

$$\frac{9}{10} - 1 = -\sin^2 \theta \rightarrow -\frac{1}{10} = -\sin^2 \theta \rightarrow \frac{1}{10} = \sin^2 \theta \rightarrow \sin \theta = \pm \frac{1}{\sqrt{10}}$$