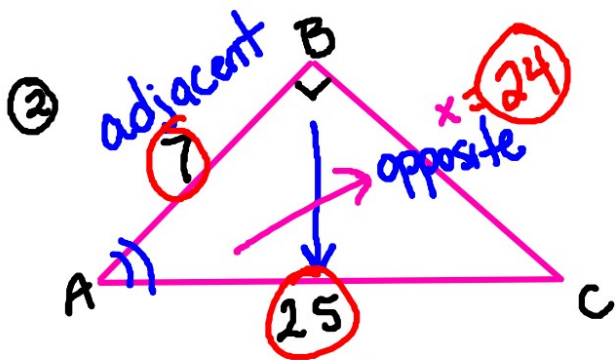


DRILL

$$\frac{5\pi}{4} \cdot \frac{180}{\pi} = \frac{900}{4} = \boxed{225^\circ}$$

① Convert $\frac{5\pi}{4}$ into degrees.



Find

$$\begin{aligned}\sin A &= \frac{24}{25} \\ \cos A &= \frac{7}{25} \\ \tan A &= \frac{24}{7}\end{aligned}$$

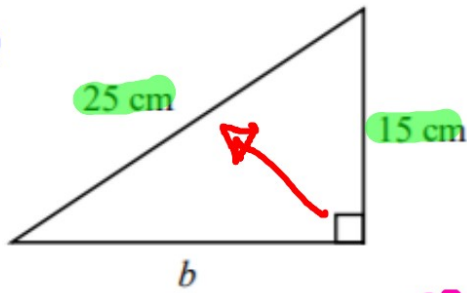
③ what is the $\cos\left(\frac{2\pi}{3}\right)$?

$\cos(\theta) \Rightarrow$ x-coordinate

$$\begin{aligned}7^2 + x^2 &= 25^2 \\ 49 + x^2 &= 625 - 49 \\ x^2 &= 576 \\ x &= 24\end{aligned}$$

$$\cos\left(\frac{2\pi}{3}\right) = -\frac{1}{2}$$

①



$$\text{leg}^2 + \text{leg}^2 = \text{hyp}^2$$

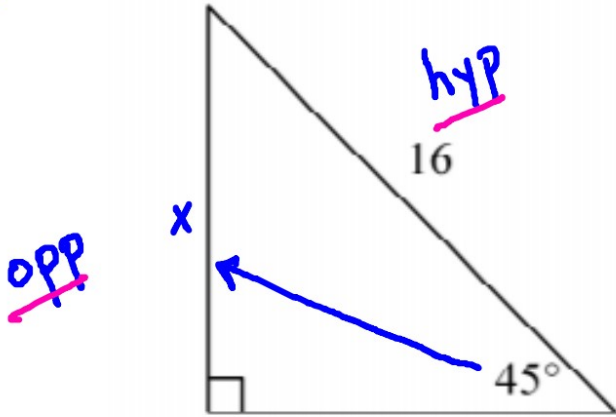
$$15^2 + b^2 = 25^2$$

$$225 - \cancel{225} + b^2 = 625 - 225$$

$$\sqrt{b^2} = \sqrt{400}$$

$$b = 20$$

②



$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$16 \cdot \sin 45^\circ = \frac{x}{16} \cdot 16$$

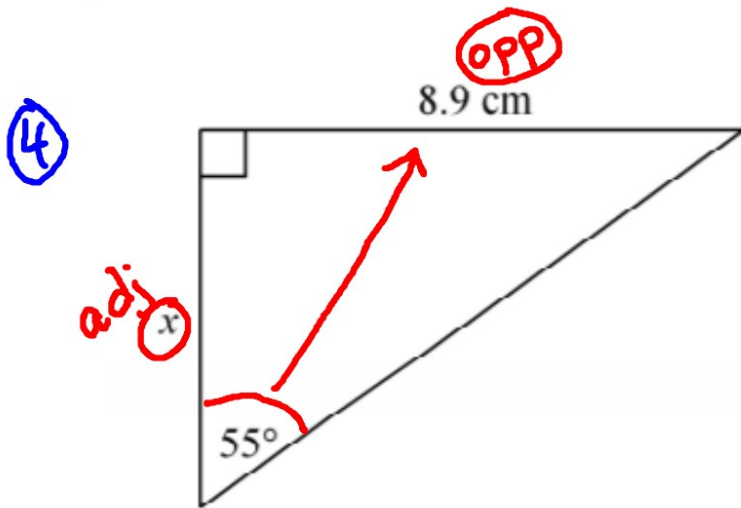
$$16 \sin 45^\circ = x$$

$$11.3 \approx x$$

$$16 \left(\frac{\sqrt{2}}{2} \right) = x$$

$$x = \frac{16\sqrt{2}}{2} = \underline{\underline{8\sqrt{2}}}$$

③ $\sin 58^\circ \approx .85$



$$\frac{\tan 55^\circ}{1} = \frac{8.9}{x}$$

$$\frac{x \tan 55^\circ}{\tan 55^\circ} = \frac{8.9}{\tan 55^\circ}$$

$$x \approx 6.23$$

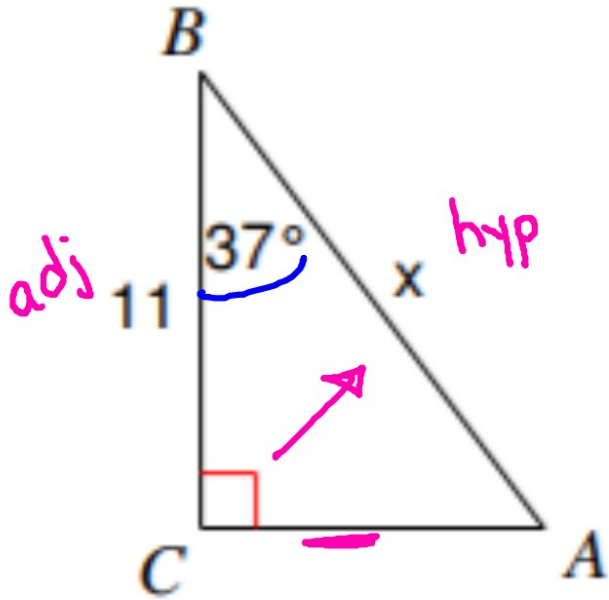
⑤ $40^\circ \cdot \frac{\pi}{180} = \frac{2\pi}{9}$

$$110^\circ \cdot \frac{\pi}{180} = \frac{11\pi}{18}$$

$$94^\circ \cdot \frac{\pi}{180} = \frac{47\pi}{90}$$

$$290^\circ \cdot \frac{\pi}{180} = \frac{29\pi}{18}$$

6



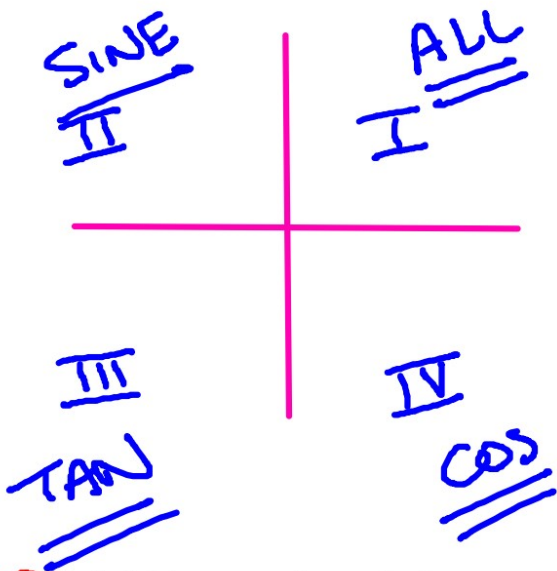
$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\cos 37^\circ = \frac{11}{x}$$

$$\frac{x \cos 37^\circ}{\cos 37^\circ} = \frac{11}{\cos 37^\circ}$$

$$x \approx 13.77$$

⑦ Sine θ is positive I & II



⑧ When looking at $5\pi/6$ on the unit circle, the Cosine value(s) is $\sqrt{-3}/2$.

When looking at $5\pi/4$ on the unit circle, the both value(s) is $-\sqrt{2}/2$