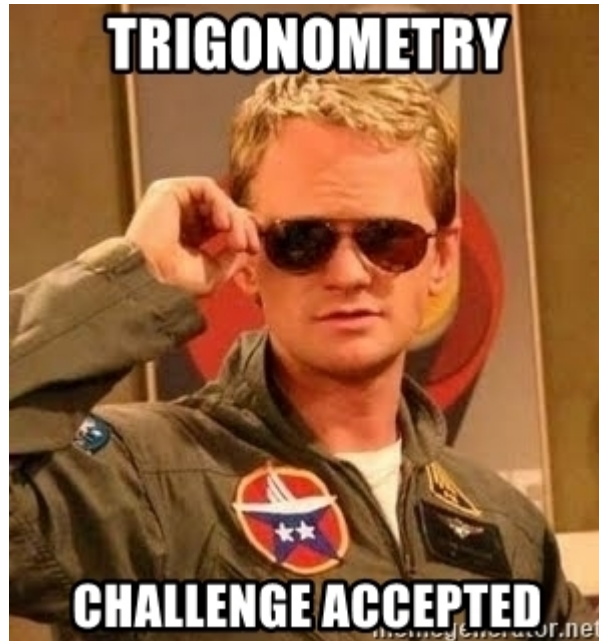
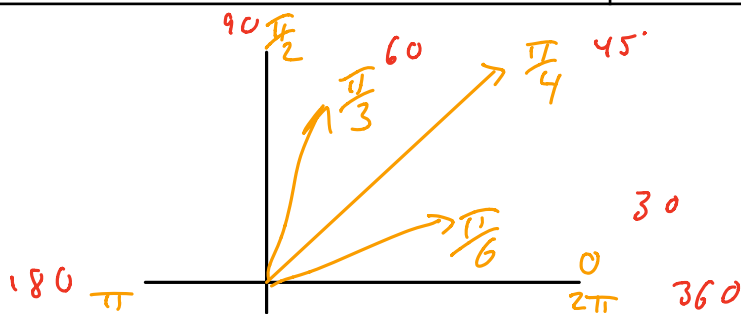


Trig Ratio: More of the Same



Solve for θ

<p>$\sin(\theta) = 0.5, 0^\circ \leq \theta < 360^\circ$</p> <p>$\sin \theta = \frac{1}{2}$ = $\frac{\text{opp}}{\text{hyp}}$</p> <p>$\theta = \frac{\pi}{6}$ $\frac{5\pi}{6}$</p>	<p>$\cos(\theta) = -\frac{\sqrt{3}}{2}, 0^\circ \leq \theta < 360^\circ$</p> <p>$\theta = \frac{2\pi}{3}$ $= \frac{4\pi}{3}$</p>
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$$65^\circ \cdot \frac{\pi}{180^\circ} =$$

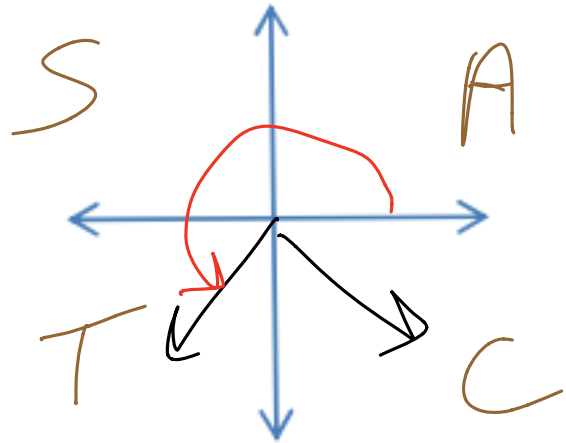
You try:

Solve for θ :

$$\sin(\theta) = -\frac{1}{\sqrt{2}}, 0^\circ \leq \theta < 360^\circ$$

$$\theta_r = \frac{\pi}{4}$$

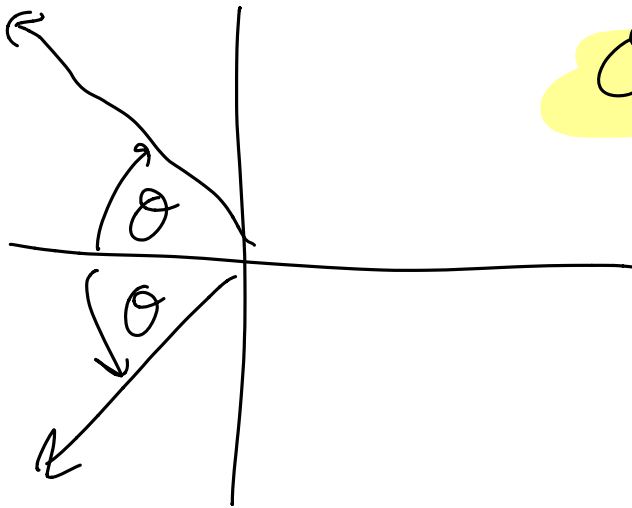
$$\theta = \frac{5\pi}{4}, \frac{7\pi}{4}$$



Determine θ to the nearest tenth of a degree given that

$$\cos(\theta) = -0.6753.$$

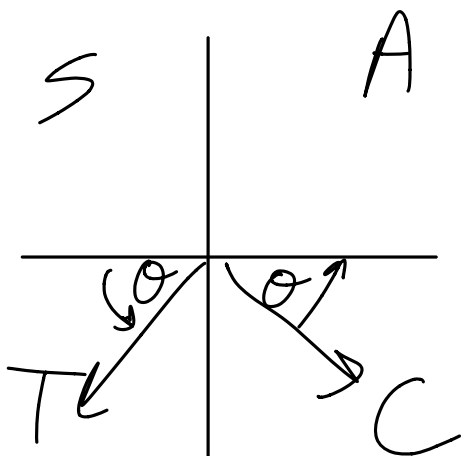
$$\cos^{-1}(-.6753) = 47.5^\circ$$



$$\theta = 180 \pm 47.5^\circ$$

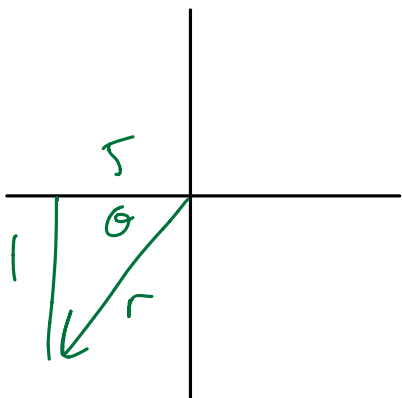
Determine θ to the nearest tenth of a degree given that $\sin(\theta) = -0.8090$.

$$\sin^{-1}(-0.8090) = 54^\circ$$



$$\begin{aligned} \theta &= 180 + 54 \\ &= 360 - 54 \end{aligned}$$

Suppose θ is an angle in standard position with terminal arm in Q3, and $\tan(\theta) = \frac{1}{5}$. Determine the exact values of $\sin(\theta)$ and $\cos(\theta)$.



$$\begin{aligned} r &= \sqrt{5^2 + 1^2} \\ &= \sqrt{26} \end{aligned}$$

$$\sin \theta = -\frac{1}{\sqrt{26}} = -\frac{\sqrt{26}}{26}$$

$$\cos \theta = -\frac{5}{\sqrt{26}} = -\frac{5\sqrt{26}}{26}$$

HW:
15-17

