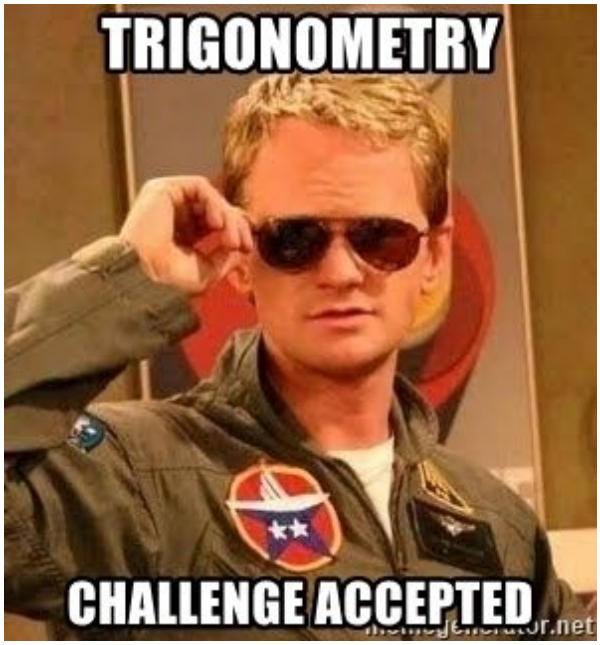
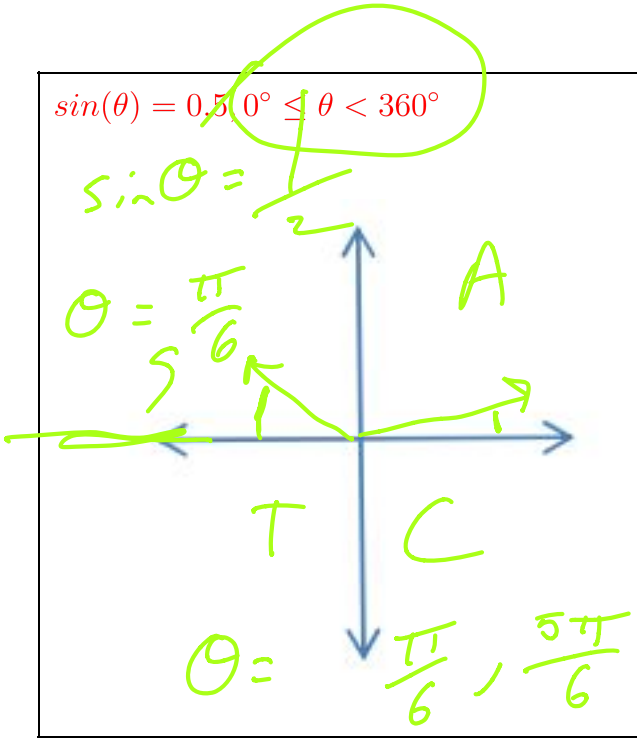
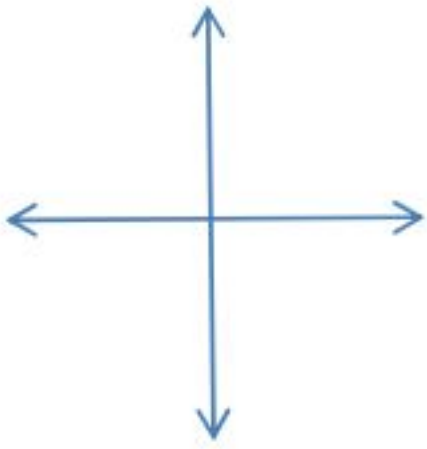
Trig Ratio: More of the Same

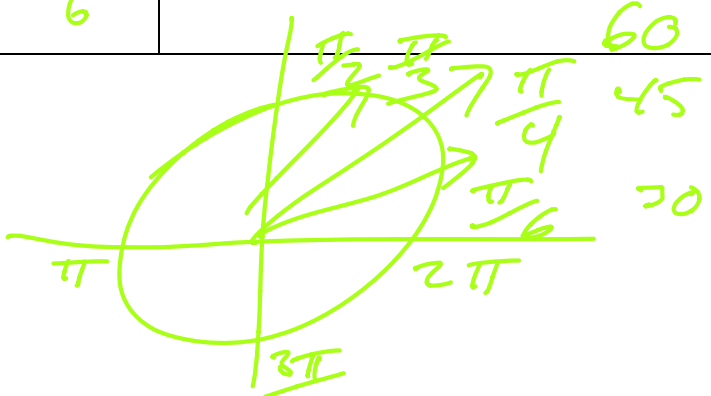


Solve for θ

$sin(\theta) = 0.5, 0° \leq \theta < 360°$	$cos(\theta) = -\frac{\sqrt{3}}{2}, 0° \leq \theta < 360°$







You try:

Solve for θ:

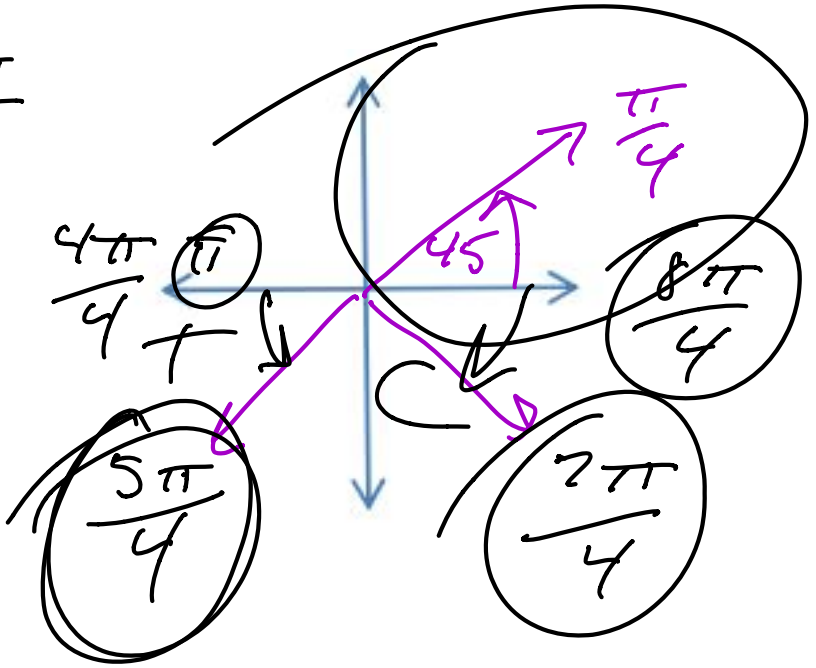
$sin(\theta) = -\frac{1}{\sqrt{2}}, 0° \leq \theta < 360°$

$\frac{4\pi}{4}$

$\frac{1\pi}{1}$

$\frac{2\pi}{2}$

$\frac{4\pi}{4}$



$\theta_r = 45$

$1 + \frac{1}{4}$

$\frac{4}{4} + \frac{1}{4}$

$= \frac{5}{4}$

Determine θ to the nearest tenth of a degree given that $cos(\theta) = -0.6753$.

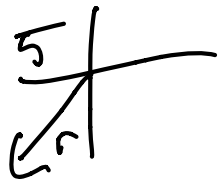
$\theta = \cos^{-1}(-.6753)$

$= 2.31$

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

$\theta = -.94$

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 $cos(\theta)$.



$r = \sqrt{1^2 + 5}$

$= \sqrt{26}$

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

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

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