

DRILL  $120 \left( \frac{\pi}{180} \right) = \frac{120\pi}{180} = \boxed{\frac{2\pi}{3}}$

① Convert  $120^\circ$  into radians.

② Convert  $\frac{3\pi}{4}$  into degrees.

$$\frac{3\pi}{4} \left( \frac{180}{\pi} \right) = \frac{540}{4} = 135^\circ$$

Find

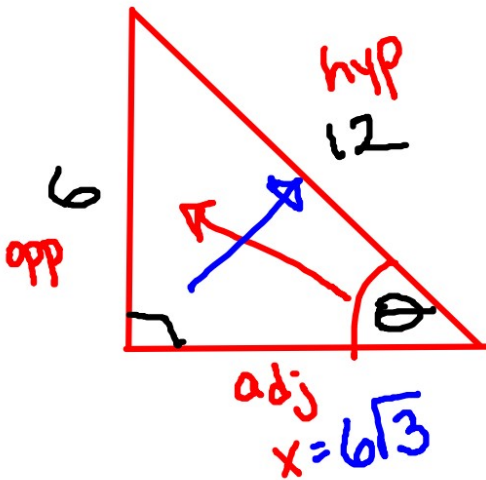
$$\sin \theta = \frac{6}{12} = \boxed{\frac{1}{2}}$$

$$\tan \theta = \frac{6}{6\sqrt{3}}$$

$$x = 6\sqrt{3}$$

$$\frac{6}{6\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{6\sqrt{3}}{3 \cdot 3}$$

③



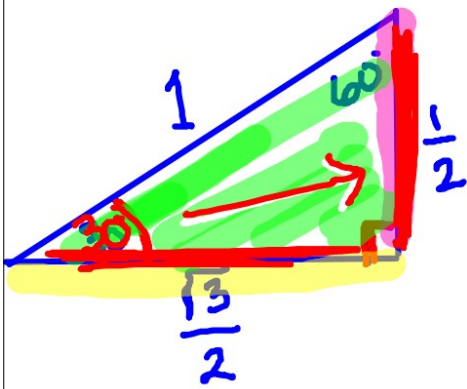
$$6^2 + x^2 = 12^2$$

$$36 + x^2 = 144$$

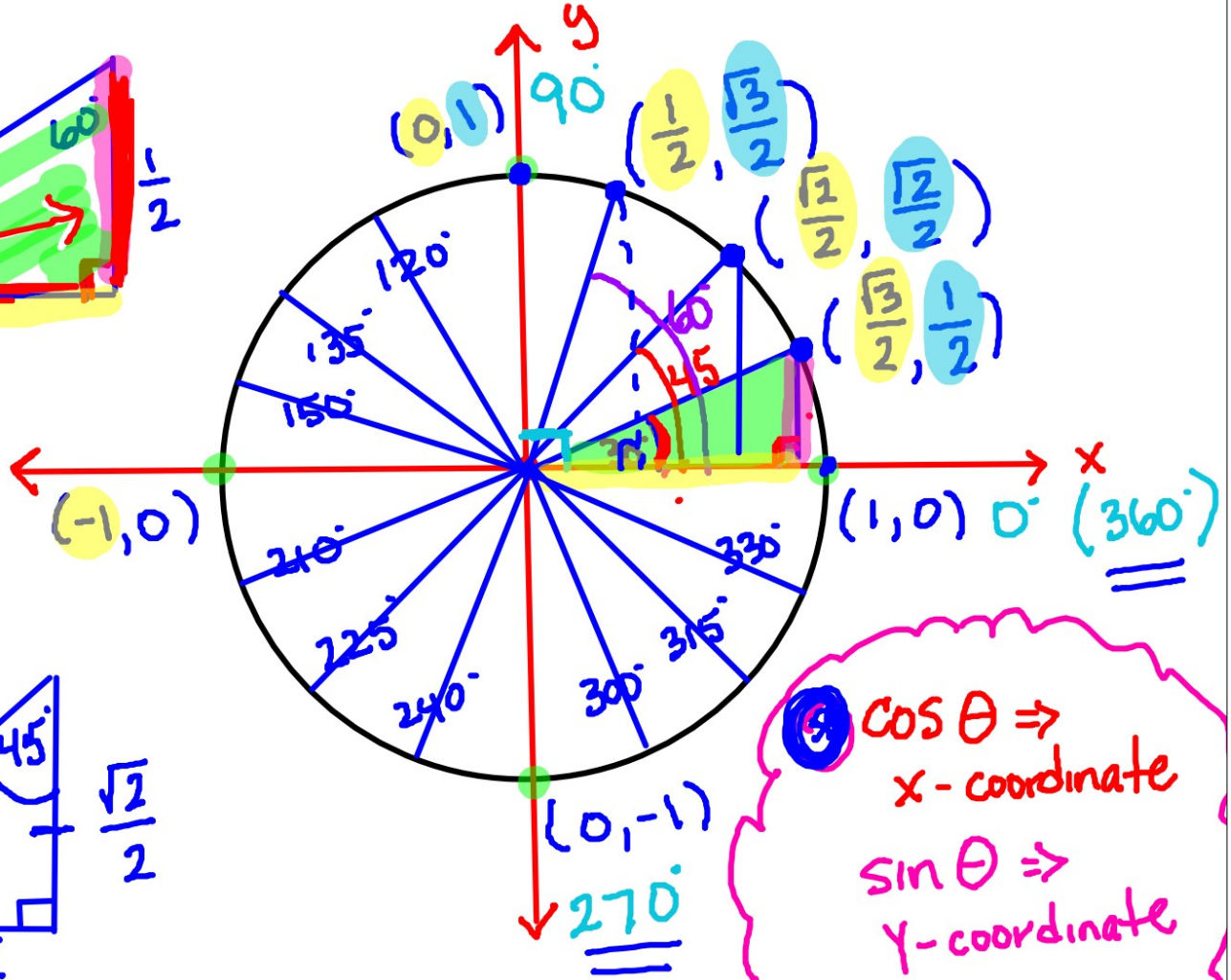
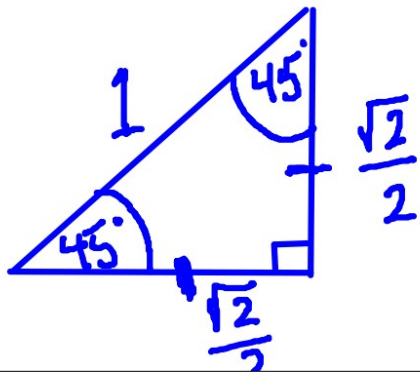
$$\sqrt{x^2} = \sqrt{108}$$

$\Delta = 180^\circ$

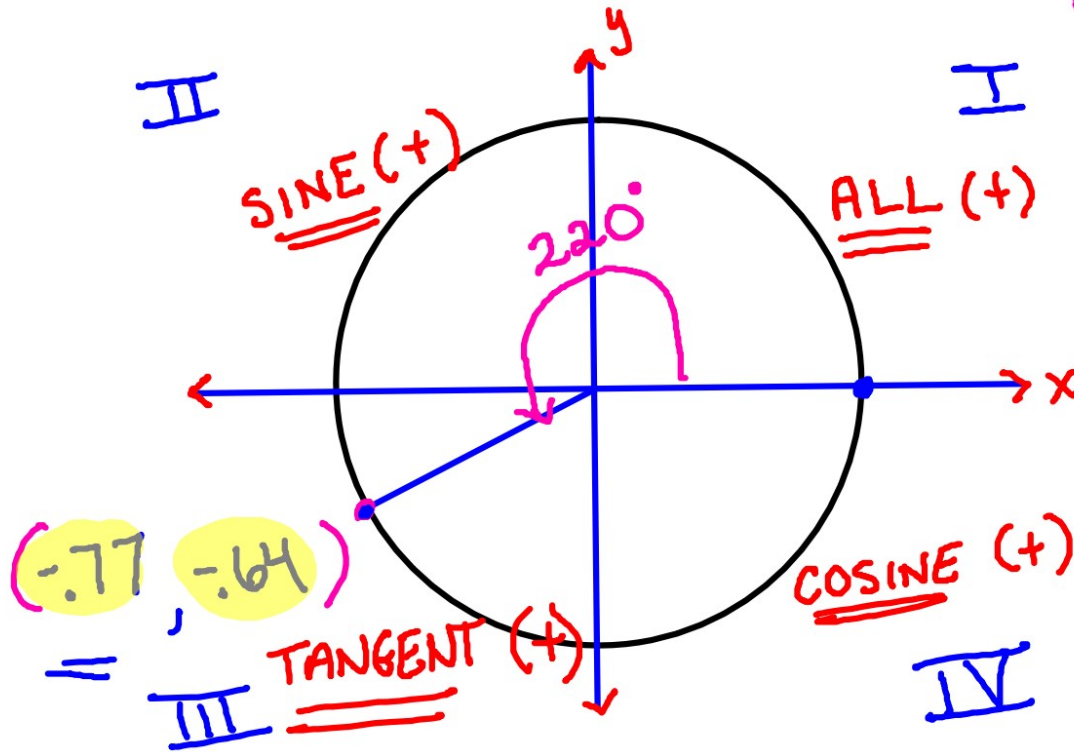
# Unit Circle (radius = 1)



$180^\circ$



Round to two decimal places



$$\cos 220^\circ \approx -.77 \quad (x)$$
$$\sin 220^\circ \approx -.64 \quad (y)$$

$$\tan \theta = \frac{\sin \theta}{\cos \theta} = \frac{y}{x}$$