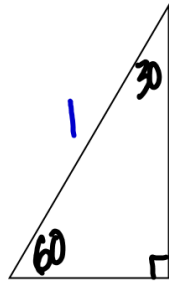


10.3



short leg = $\frac{1}{2}$ hypotenuse
 long leg = short leg $\sqrt{3}$

SOH-CAH-TOA

$\frac{\sqrt{3}}{2} = .8660$

$\sin 60 = .8660$

$\cos 60 = .5$

$\tan 60 = 1.7321$

$\frac{1}{2}$

$\frac{\sqrt{3}}{2}$

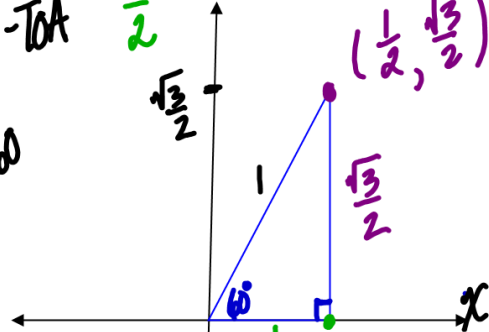
$\frac{1}{2}$
 $(\frac{1}{2}, 0)$

$\frac{\frac{\sqrt{3}}{2}}{1} = \frac{\sqrt{3}}{2}$

$\frac{\frac{1}{2}}{1} = \frac{1}{2}$

$\frac{\frac{\sqrt{3}}{2}}{\frac{1}{2}}$

$\frac{\sqrt{3}}{2} \cdot \frac{2}{1} = \sqrt{3}$



$(\frac{1}{2}, \frac{\sqrt{3}}{2})$

$x = \frac{1}{2}$

$y = \frac{\sqrt{3}}{2}$

$r = 1$

$\sin \theta = \frac{y}{r}$

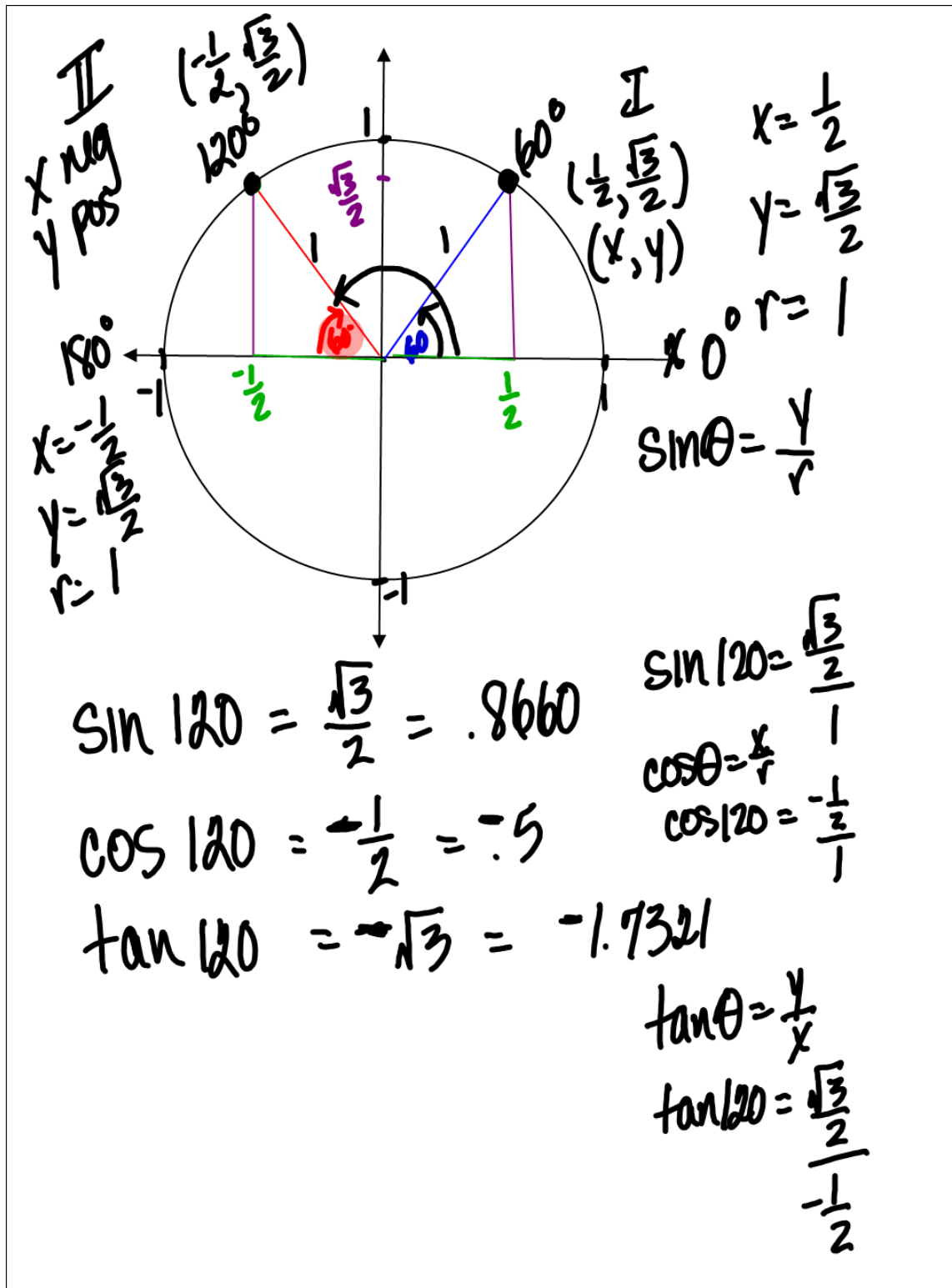
$\sin 60 = \frac{\frac{\sqrt{3}}{2}}{1}$

$\cos \theta = \frac{x}{r}$

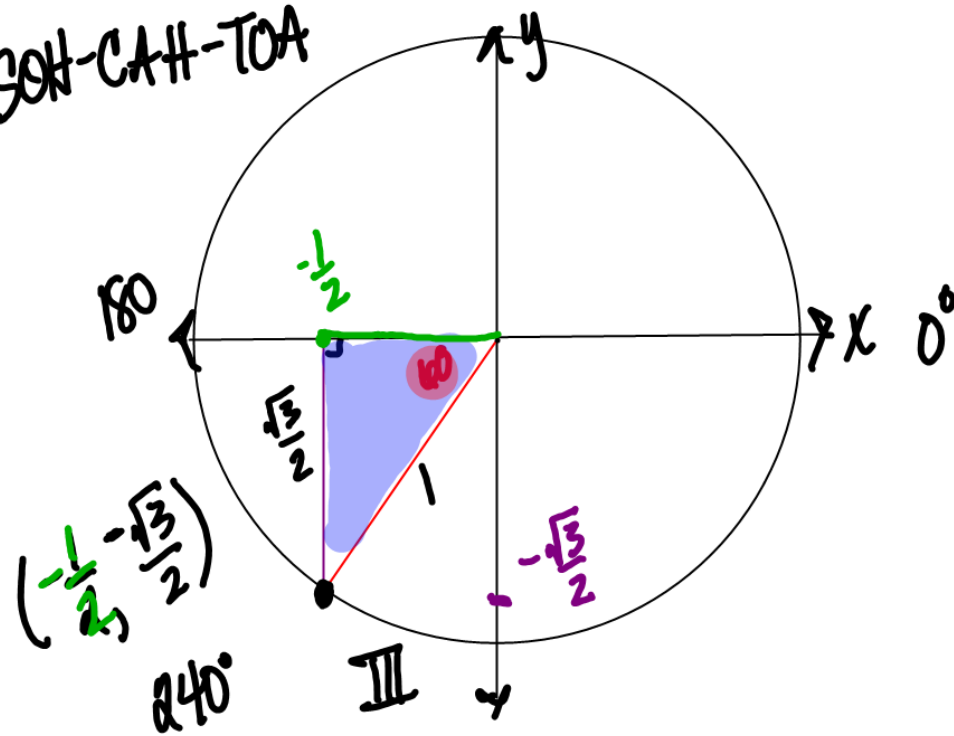
$\cos 60 = \frac{\frac{1}{2}}{1}$

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

$\tan 60 = \frac{\frac{\sqrt{3}}{2}}{\frac{1}{2}}$



SOH-CAH-TOA

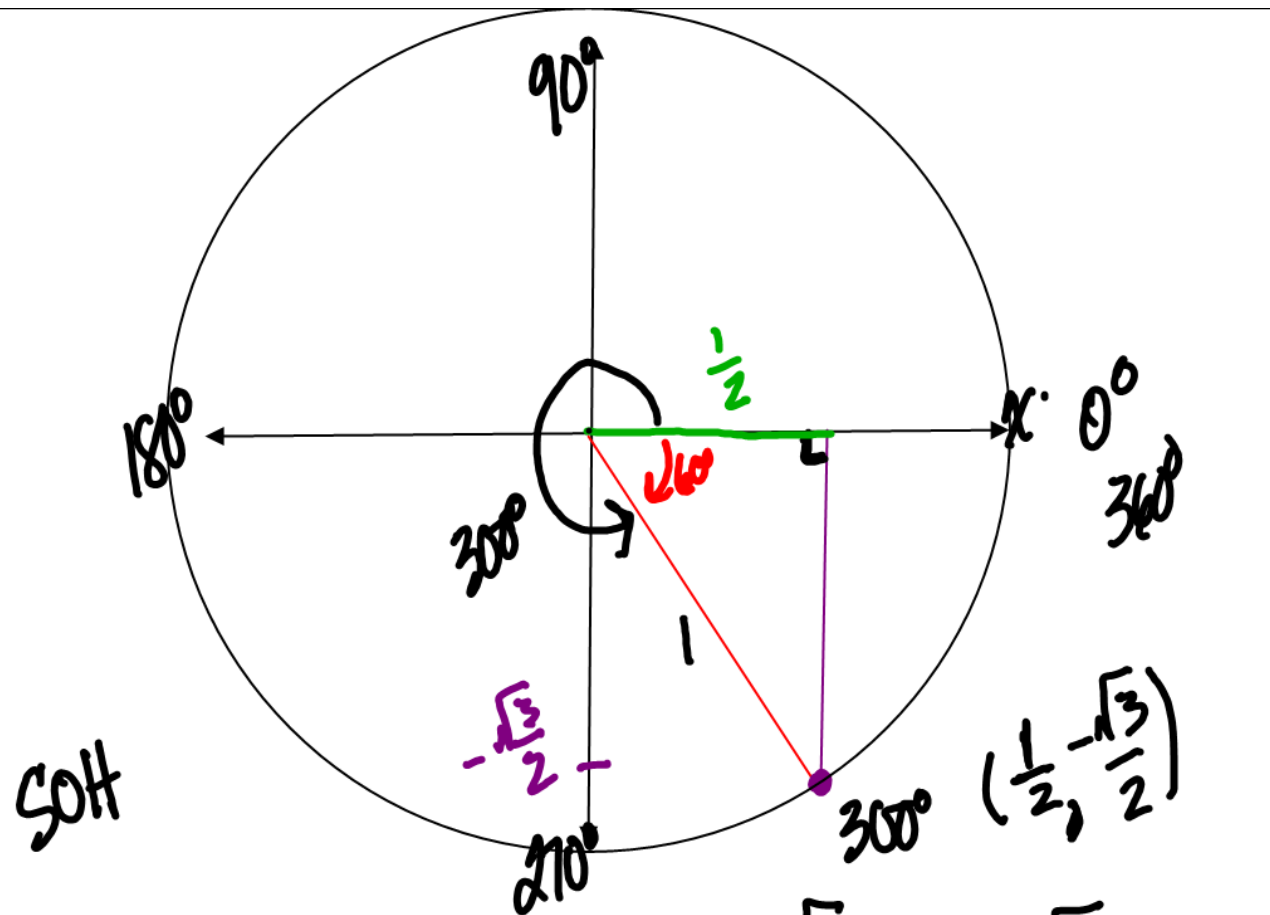


$$\sin 240 = \frac{-\frac{\sqrt{3}}{2}}{1} = -\frac{\sqrt{3}}{2} = -.8660$$

$$\cos 240 = \frac{-\frac{1}{2}}{1} = -\frac{1}{2} = -.5$$

$$\tan 240 = \frac{-\frac{\sqrt{3}}{2}}{-\frac{1}{2}} = \sqrt{3} = 1.7321$$

$$\frac{\sin}{\cos}$$



SOH

$$\sin 300 = -.8660 = \frac{-\sqrt{3}}{2} = -\frac{\sqrt{3}}{2}$$

$$\cos 300 = +.5 = \frac{1}{2} = \frac{1}{2}$$

$$\tan 300 = -1.7321 = -\sqrt{3} = \frac{-\frac{\sqrt{3}}{2}}{\frac{1}{2}}$$

