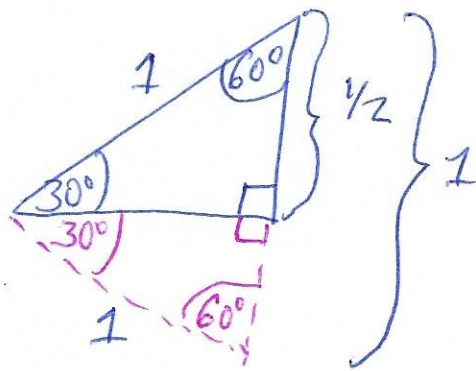


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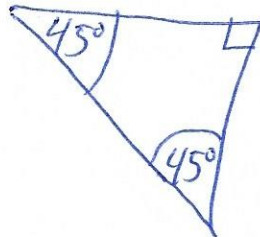
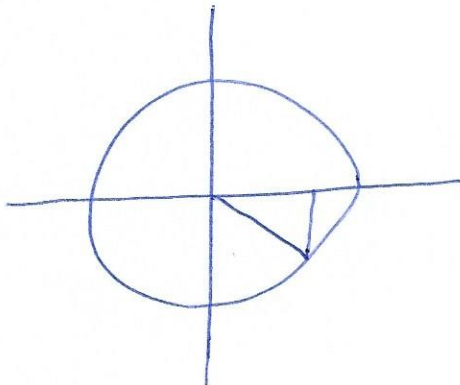
$$x^2 + \left(\frac{1}{2}\right)^2 = 1^2$$

$$x^2 + \frac{1}{4} = 1$$

$$x^2 = \frac{3}{4}$$

$$x = \sqrt{\frac{3}{4}} = \frac{\sqrt{3}}{\sqrt{4}} = \frac{\sqrt{3}}{2}$$

Ex: $\sin\left(-\frac{\pi}{4}\right) = \sin(-45^\circ)$



$$x^2 + y^2 = 1$$

$$x^2 + x^2 = 1$$

$$2x^2 = 1$$

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

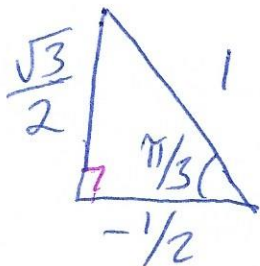
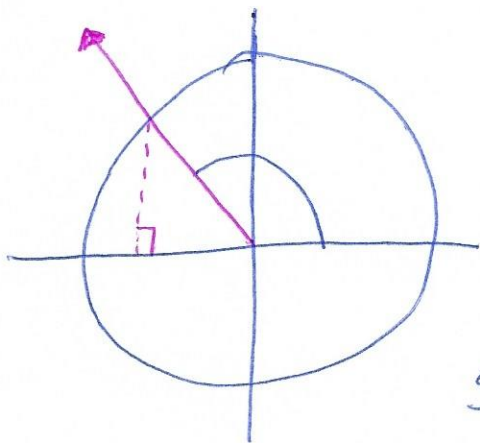
$$x = \frac{1}{\sqrt{2}}$$

The class did an activity where a huge unit circle was projected on the board and students came up to fill in the missing values.

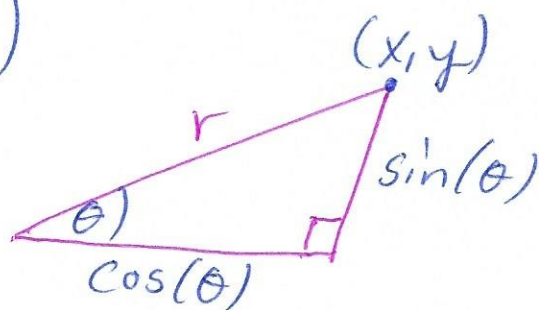
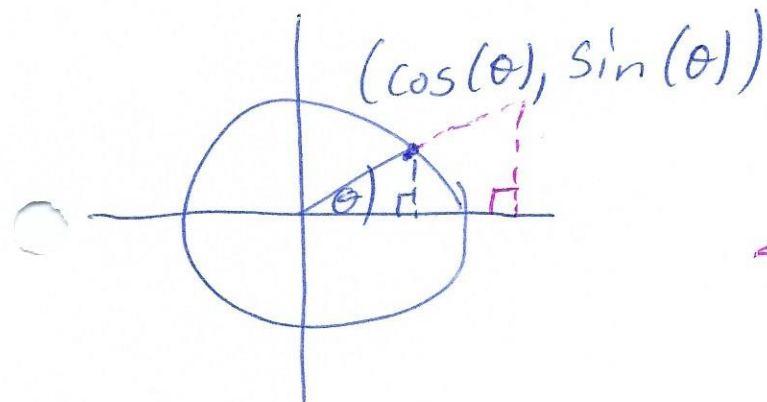


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Ex: $\cos(2\pi/3)$



$$\text{So, } \cos(2\pi/3) = -1/2$$



$$\sin(\theta) = \frac{\text{opposite}}{\text{hypotenuse}}, \quad \cos(\theta) = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\tan(\theta) = \frac{\sin(\theta)}{\cos(\theta)}$$

