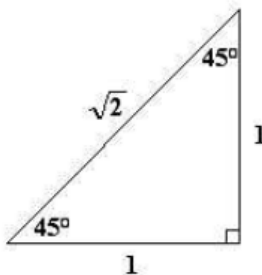


$$\frac{7\pi}{9}$$

$$\frac{16\pi}{13}$$

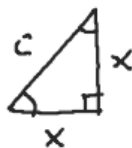
$$\frac{17\pi}{9}$$

$$-\frac{29\pi}{18}$$



Special Right Triangles

45-45-90



$$x^2 + x^2 = c^2$$

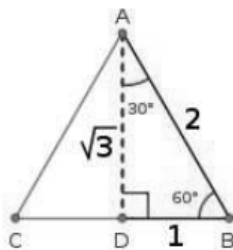
$$\sqrt{2x^2} = \sqrt{c^2}$$

$$\sqrt{2} \cdot \sqrt{x^2} = c$$

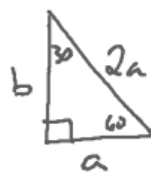
$$x\sqrt{2} = c$$

- Both legs are the same length

- Hypotenuse will equal leg  $\cdot \sqrt{2}$



30-60-90  $\Delta$



$$a^2 + b^2 = (2a)^2$$

$$a^2 + b^2 = 4a^2$$

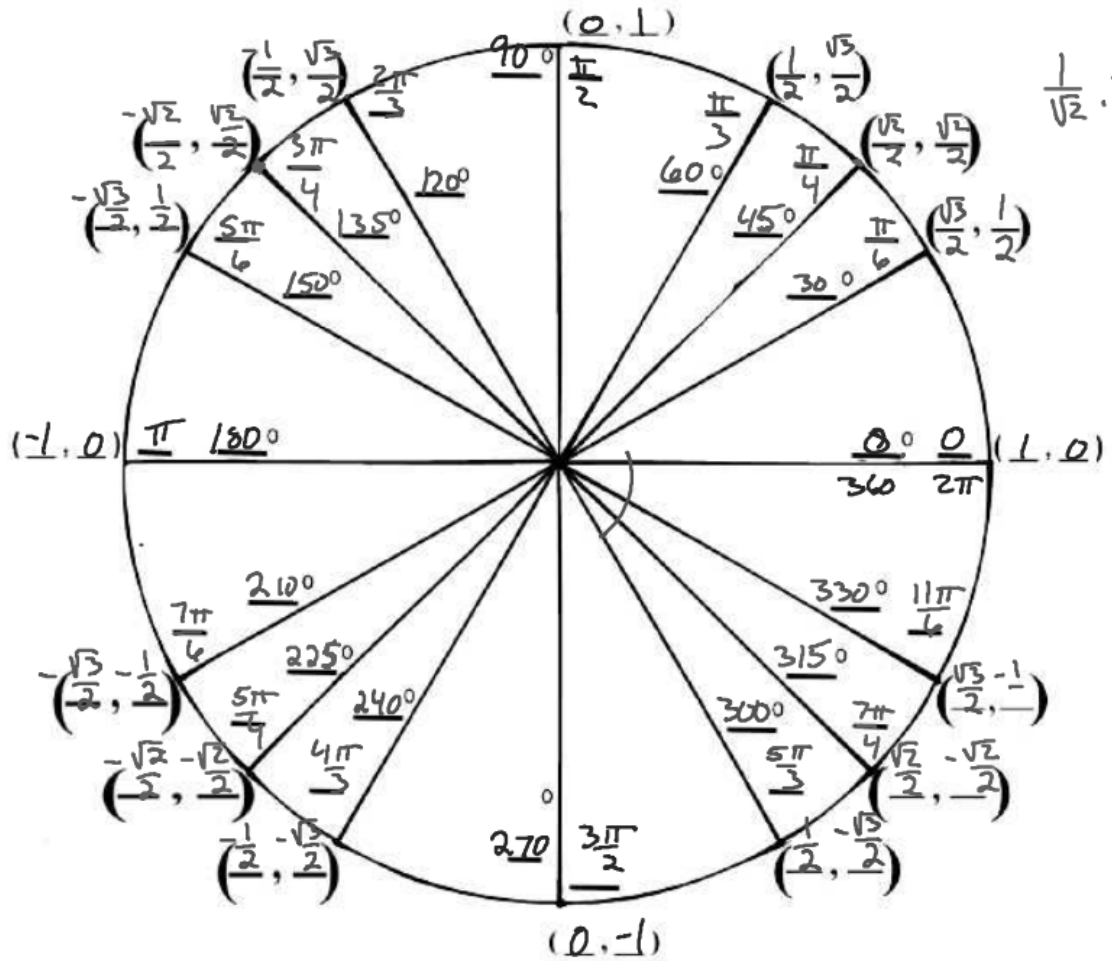
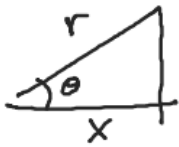
$$b^2 = 3a^2$$

- Hypotenuse is twice as long as shortest leg

- Longer leg - shorter leg times  $\sqrt{3}$

$$b = a\sqrt{3}$$

# Unit Circle, Fill in the blank

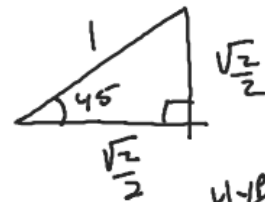


$$\frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{2}$$

$$\cos \theta = x$$

$$\sin \theta = y$$

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



$$\tan 45^\circ = \frac{\frac{\sqrt{2}}{2}}{\frac{\sqrt{2}}{2}} = 1$$

