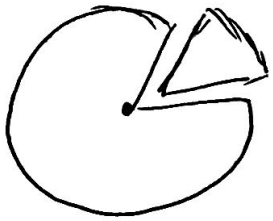
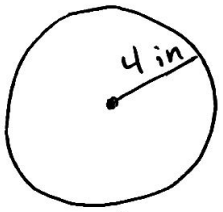
11.3 Area of a Sector

Sector is a part of a circle



Area of a Circle

$$A = \pi r^2$$



$A = \pi (4)^2$

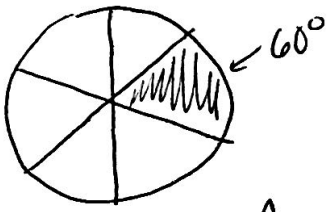
$= 3.14(4)^2 = \boxed{50.24 \text{ in}^2}$

Area of a sector

$$A = \pi r^2 \left(\frac{\text{angle}}{360^\circ}\right)$$

↑ the part of the circle

$\frac{360}{6} = 60^\circ$



$A = \pi (4)^2 \left(\frac{60^\circ}{360^\circ}\right)$

$= \boxed{8.37 \text{ in}^2}$

Bonus: Find a Sector around the house (Not: pizza, pie, cheese, & do not create the shape)

$A = \pi (3)^2 \left(\frac{120}{360}\right)$

$= \boxed{9.42 \text{ m}^2}$

Assignment: do the practice assignment on sector