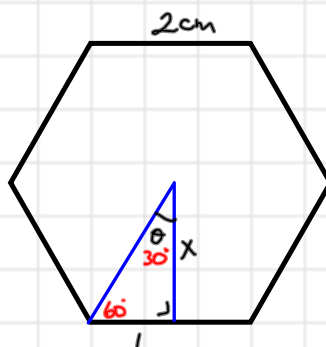


Find the area of a hexagon with sides of length 2cm?



$$\theta = \frac{360^\circ}{12} = 30^\circ$$

triangle

$$A = \frac{hb}{2}$$

$$\tan 60^\circ = \frac{x}{1} \Rightarrow x = \sqrt{3}$$

$$\Delta = \frac{(1)(\sqrt{3})}{2} = \frac{\sqrt{3}}{2}$$

The hexagon contains 12 of these triangles

$$\text{Area hexagon} = \frac{12\sqrt{3}}{2} = 6\sqrt{3} \text{ cm}^2$$