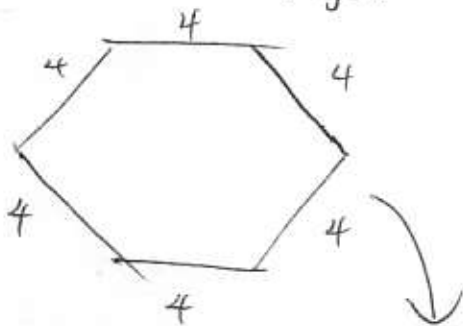


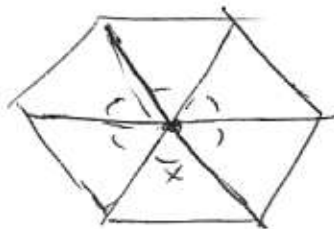
24

regular hexagon



Area = ?

Draw a dot at the center
 & split it into 6 triangles
 by connecting the center to each
 corner



There are 6 angles around
 the center which form
 a full circle of 360°

$$6x = 360$$

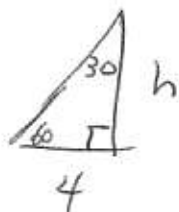
$$x = \frac{360}{6} = 60^\circ$$



4 = base

$$A = \frac{1}{2} b \cdot h$$

To figure out the height,
 split the triangle in half



By 30-60-90,

$$h = 4\sqrt{3}$$

$$A = \frac{1}{2}(b \cdot h) = \frac{1}{2}(4)(4\sqrt{3})$$

$$A = 2(4\sqrt{3}) = 8\sqrt{3}$$

There are 6 triangles so total = $6 \cdot 8\sqrt{3}$

$$\text{total } A = 48\sqrt{3}$$