

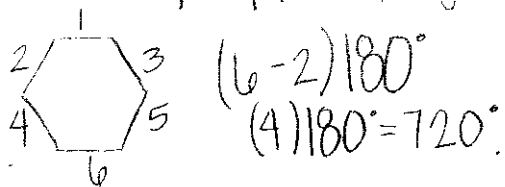
Sum formula  
 $(N-2)180^\circ$

9.2

N is the number of sides.

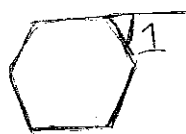
subtract 2 to figure out the number of triangles in a polygon.

Multiply by  $180^\circ$  to get the sum of measure of a hexagon.



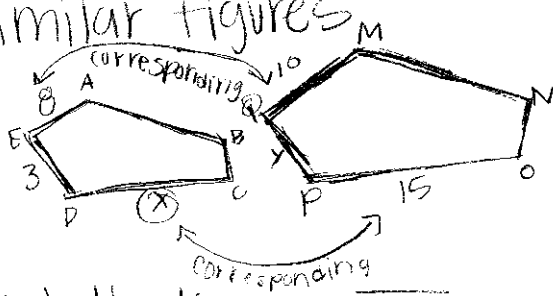
To find the interior angle of a regular polygon you divide the sum interior angles by the # of sides.

$$\frac{720^\circ}{6} = 120^\circ \quad \frac{\text{SUM}}{\text{Sides}} = x$$



to find a exterior angle of a interior angle.  
 $M\&I = 180^\circ - 120^\circ = 60^\circ$

## similar figures



find the length of  $\overline{CD}$

first you must find the corresponding side that have given measures.

$$\frac{\overline{AE}}{\overline{MQ}} = \frac{\overline{CD}}{\overline{PO}} \text{ then plug in the numbers to the right sides}$$

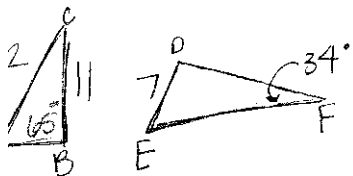
$$\frac{8 = x}{10} = \frac{\quad}{15}$$

Cross multiply  $8 \cdot 15 = 120 = 10 \cdot x$  12  
 10 & x are left so you divide 10 by 120 to get the length of  $\overline{CD} = 12$

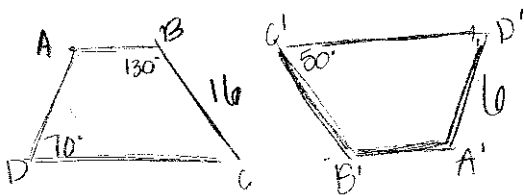
find the length of  $\overline{PQ}$

$$\frac{\overline{AE}}{\overline{MQ}} = \frac{\overline{DE}}{\overline{PQ}} =$$

## Congruent figures



What is the length of  $\overline{DF}$ ?  
 What is the length of  $\overline{AB}$ ?



1. Find the length of  $\overline{A'B'}$

2. Find the length of  $\overline{AD}$

3. Find the length of  $\overline{B'C'}$

4.  $\triangle BCD \cong$

5.  $\triangle A'D'C' \cong$