

11-12-18 5<sup>th</sup> Geo

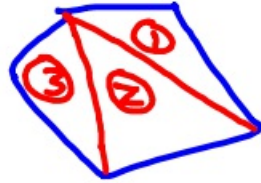
- ① What is the sum of all the angles in a 42-gon?

$$\frac{40}{180} \\ 7200$$

$$(n-2) \cdot 180$$

$$(42-2) \cdot 180$$

$$7,200$$



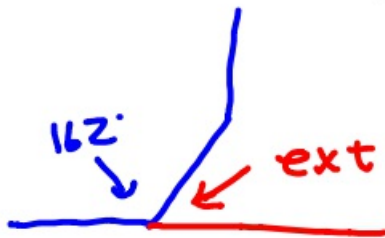
- ② What other 2 formulas did we use on Friday?

$$\text{ext } \angle = \frac{360}{n}$$

$$n = \frac{360}{\text{ext. } \angle}$$



- ③ Give the exterior angle for a regular 20-gon.




$$\text{ext } \angle = \frac{360}{n}$$

$$= \frac{360}{20}$$


$$= 18^\circ$$

- ④ What is the interior angle of a regular 90-gon?




ext  $\angle = \frac{360}{n}$   
 $= \frac{360}{90}$   
 $= 4$

- ⑤ The interior angle to a regular polygon is  $150^\circ$ . How many sides is the polygon?



$n = \frac{360}{\text{ext. } \angle}$   
 $n = \frac{360}{30}$   
 $n = 12$

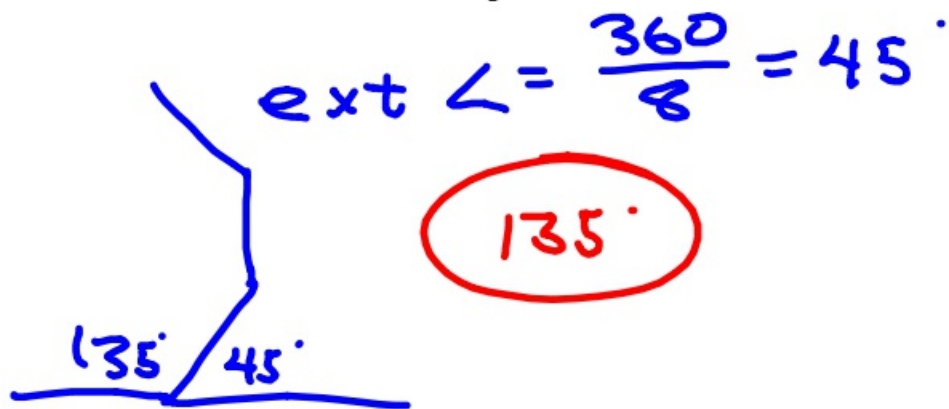
- ⑥
- 
- What is  $n$ ?  
 $(5-2) \cdot 180 = 540$

$$n + 2n + 2n + 10 + 2n + 3n - 10 = 540$$

$$10n = 540$$

$$n = 54$$

⑦ How many degrees is the interior angle of a regular octagon?



$135^\circ$

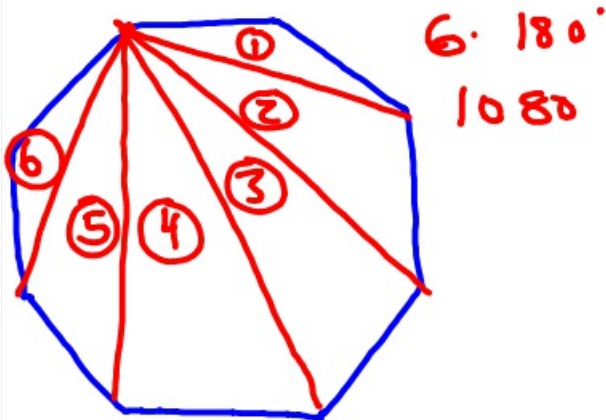
⑧ Where can I use any of this in real life?



11-12-18 6<sup>th</sup> Geo

- ① How many degrees is inside an octagon?

$$(n-2) \cdot 180$$



- ② Name 2 other formulas I did with you on Friday?

$$\text{exterior } \angle = \frac{360}{n}$$

$$n = \frac{360}{\text{ext. } \angle}$$

③ What is the ext.  $\angle$  to a decagon?

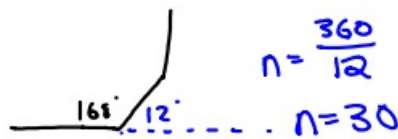
$$\begin{aligned} \text{ext } \angle &= \frac{360}{n} \\ &= \frac{360}{10} \\ &= 36^\circ \end{aligned}$$



④ What is the interior angle of a regular 18-gon?



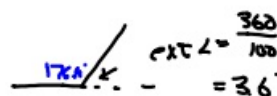
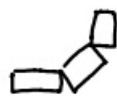
⑤ The interior angle to a regular polygon is  $168^\circ$ . How many sides is the polygon?



⑥ What is interior angle of a regular 60-gon?



⑦ Where in real life will we use this stuff?



Stan Lee  
RIP  $\ddot{\smile}$  Love  
u d w

