Interior and Exterior Angles in a Polygon

* Know what they look like, identify them
* There are 4 total formulas: n=number of sides or angles
  + Sum of Interior Angles = (n-2)(180) or 180n-360
  + One interior Angle (if it is regular) = above divided by n
  + Sum of Exterior = 360
  + One exterior = 360/n if it is regular

Two versions of these questions:

1. Teacher gives you n and you plug it in
2. Teacher gives you “answer” and you solve for n

Sample Questions:

Easy way: Plug in n  
All of the interior angles in an octagon add up to \_\_\_\_\_\_  
  
so n=8 and you plug it into 180n-360.   
  
Backwards of that question: “All of the int. angles add up to 1080. How many sides does it have?” \*\*\*  
180n – 360 = 1080

N=8  
\*\*\*”If each interior angle is 135, how many sides does it have?”  
  
If you look at a picture, you can see that an interior angle will be supplementary with the exterior angle (they are a straight angle pair)

**CW/HW Monday: 9-8, 9, 10, 21  
Bonus Q (if you are correct) 9-19 (circle it)  
We will turn in the HW “packet” for this week**