## Interior Angles in Polygons

Complete the following chart as you go through the calculator activity. Look for a pattern!!

| Polygon | Number of <br> Sides | Number of <br> Triangles | Total Interior Degrees |
| :--- | :---: | :---: | :---: |
| Triangle |  |  |  |
| Rectangle |  |  |  |
| Pentagon |  |  |  |
| Hexagon |  |  |  |
| Heptagon |  |  |  |
| Octagon | n |  |  |
| n-gon |  |  |  |

1. How many degrees are in ONE triangle? $\qquad$
2. How many total degrees would be in TWO triangles? $\qquad$
3. What is the relationship between the number of non-overlapping triangles in a polygon and total degrees?
4. Use the pattern you found to calculate the number of total degrees in a polygon with:
a. 20 sides
b. 52 sides
