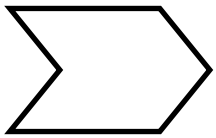
Independent Practice: **INTERIOR ANGLES OF POLYGONS**

NAME: _____ DATE:_____ PERIOD:_____

For #1 – 4, classify each polygon by its number of sides then label it as convex or concave.

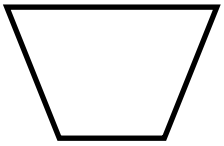
1. Classify:_____

   convex OR concave?



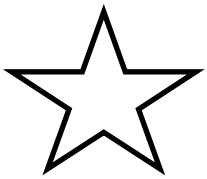
2. Classify:_____

   convex OR concave?



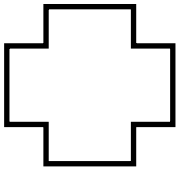
3. Classify:_____

   convex OR concave?



4. Classify:_____

   convex OR concave?



For # 5 – 8, for each of the regular polygons, find the sum of the measures of the interior angles, and then find the measure of each interior angle.

5. Sum = _____ Pentagon:
   Each = _____

6. Sum = _____ Nonagon:
   Each = _____

7. Sum = _____ 18-gon:
   Each = _____

8. Sum = _____ 32-gon:
   Each = _____

For # 9 – 10, find the number of sides if a polygon has the given measure for each interior angle.

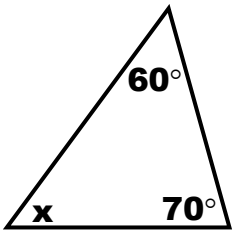
9. n = _____ 170°

10. n = _____ 162°

For #11 – 14, determine the sum of the interior angles then find the missing angle.

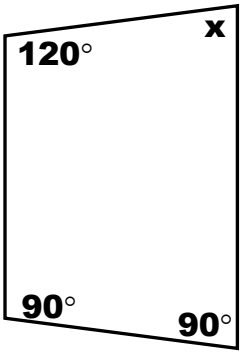
11. sum = _____

x = _____



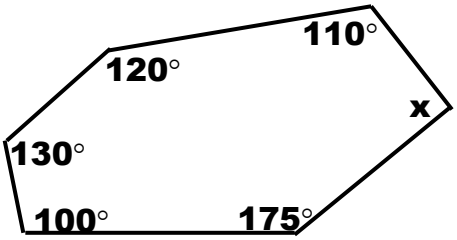
12. sum = _____

x = _____



13. sum = _____

x = _____



14. sum = _____

x = _____