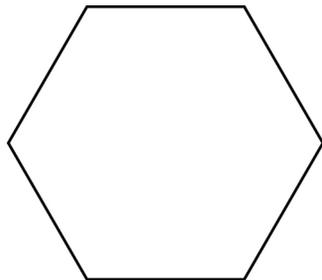
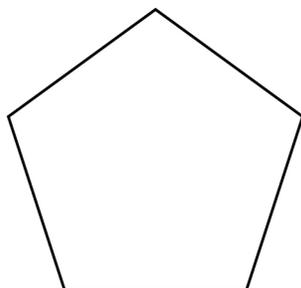


Section 5.1 Extra Practice

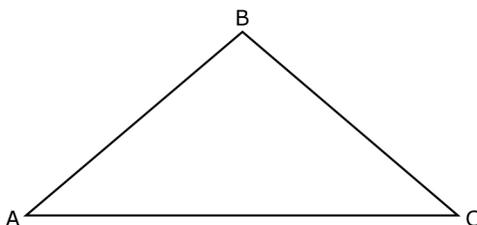
1. What is the measure of each interior angle in a regular hexagon?



2. What is the measure of each interior angle in a regular pentagon?



3. a) What is the measure of each interior angle in the isosceles triangle? **Hint:** Use a protractor.



- b) Which angles are equal to each other?
 c) Classify each angle as right, obtuse, or acute.
 d) How many of each type of angle does the isosceles triangle have?

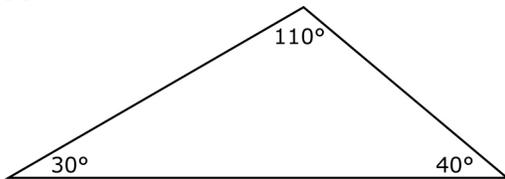
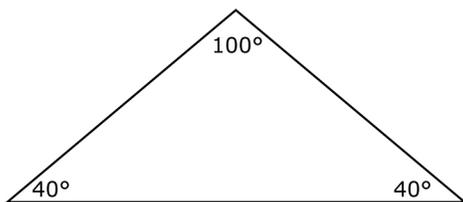
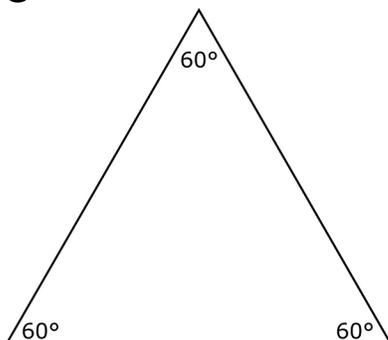
- e) Do isosceles triangles always have this number of each type of angle? Explain.

4. For each shape in #1 to #3, could you use the formula for determining each interior angle of a regular polygon, $M = \frac{180(n-2)}{n}$?
5. What is the sum of the interior angles in each shape?
 a) an equilateral triangle
 b) an octagon
 c) a parallelogram
6. For which shapes in #5 could you use the formula for determining the sum of the interior angles of a regular polygon, $S = 180(n - 2)$?
7. Complete the table with the properties related to the angle measures of the polygons listed.

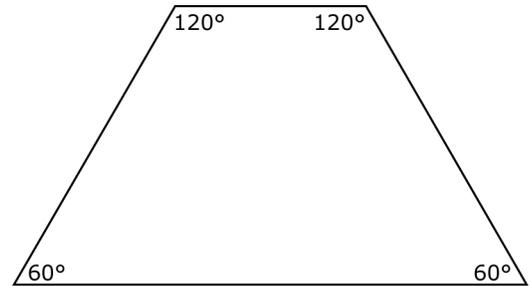
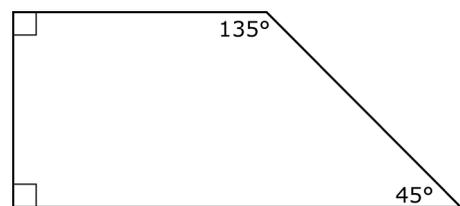
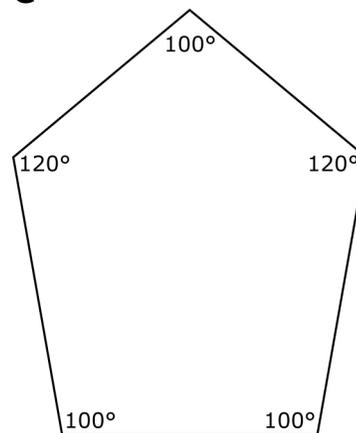
Polygon	Number of Interior Angles	Sum of Interior Angles	Measure of Each Interior Angle
Scalene triangle			
Parallelogram			
Isosceles trapezoid			
Regular hexagon			
Regular octagon			



- 8.** A ceramic top is designed for a patio table. The tabletop is shaped as a regular hexagon with a perimeter of 7.2 m. Will a bench that is 1 m long fit along one side of the table? Explain.
- 9.** Jean is making a wooden gift box. She cuts the wood for the top and bottom in the shape of a regular pentagon.
- How many interior angles are there on each of the top and bottom pieces?
 - What is the measure of each interior angle?
- 10.** Which of these triangles tessellate?

A**B****C**

- 11.**
- Which of these polygons tessellate?

A**B****C**

- 12.** Create a pattern by tessellating an irregular quadrilateral. Label all the angles on one of the quadrilaterals.
- 13.** Create a pattern by tessellating an equilateral triangle and a square.
- 14.** Create a pattern by tessellating an isosceles triangle and a parallelogram.

