



SKILL 4: Polygons

A **polygon** is a closed figure with three or more straight sides.

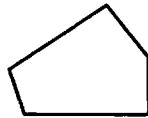
A polygon is classified by the number of sides it has. In a **regular** polygon, all the sides have the same length, and all the angles have the same measure.



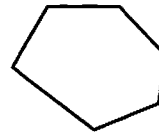
3 sides
triangle



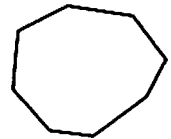
4 sides
quadrilateral



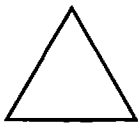
5 sides
pentagon



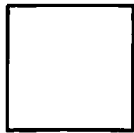
6 sides
hexagon



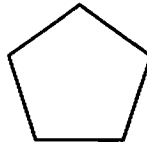
8 sides
octagon



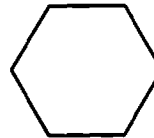
regular
triangle



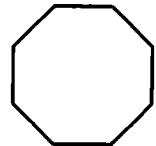
regular
quadrilateral



regular
pentagon



regular
hexagon



regular
octagon

Example

Classify the polygon and tell if it is regular.

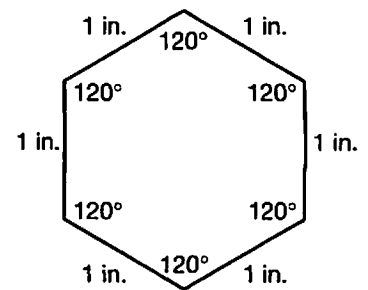
Count the sides. There are six sides, so the polygon is a hexagon.

Are the sides congruent? Yes. They all measure 1 inch.

Are the angles congruent? Yes. They are all 120° .

All sides and all angles are congruent, so the hexagon is regular.

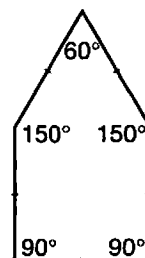
The polygon is a regular hexagon.



Guided Practice

Classify the polygon and tell if it is regular.

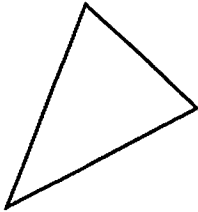
1. How many sides does the polygon have? _____
2. Name the type of polygon. _____
3. Are the sides congruent? _____
4. Are the angles congruent? _____
5. Is the polygon regular? _____



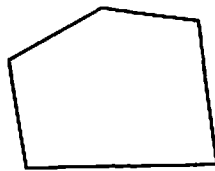
SKILL 4: Practice

Classify each polygon by the number of sides it has.

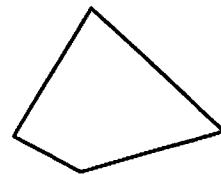
1.



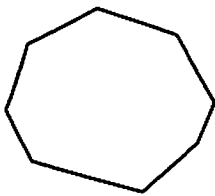
2.



3.



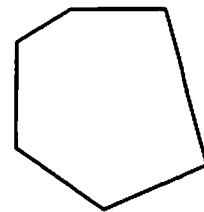
4.



5.

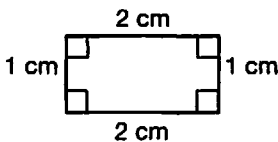


6.

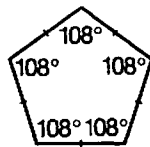


Tell whether each polygon is regular.

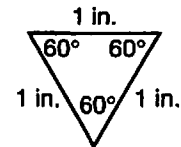
7.



8.



9.



10. Jill cut a corner off a sheet of notebook paper. The larger of the two pieces was a pentagon. What kind of polygon was the corner piece? _____



11. What kind of polygon has 6 sides?

A hexagon **C** octagon
B pentagon **D** quadrilateral

Skill 4

12. What is the measure of the complement of a 54° angle?

F 26° **H** 116°
G 36° **J** 126°

Skill 1