Spot the Corner

Sort triangles by their angles

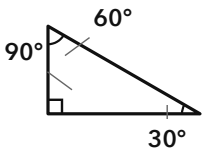
5.G.B.21 "Classify triangles according to side length (isosceles, equilateral, scalene) and angle measure (acute, obtuse, right, equiangular)."

NAME _____ DATE _____

RIGHT TRIANGLE

A right triangle has one 90° angle. A small square in a corner can mark that angle.

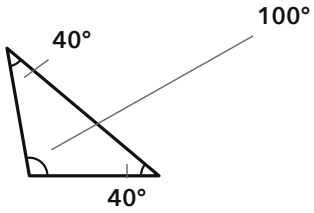
This triangle has a 90° angle.



OTHER TRIANGLE

An other triangle has no 90° angle. Its angles may all be smaller than 90°, or one may be larger.

This triangle has a 100° angle and no 90° angle.



1 SORT

8 items

For Part 1, circle RIGHT or OTHER for each figure; for Part 2, choose one figure from each group and explain how you know where each belongs.

1.

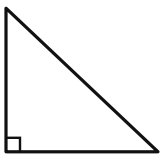


Figure 1

RIGHT OTHER

2.

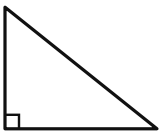


Figure 2

RIGHT OTHER

3.

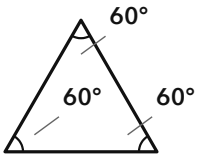


Figure 3

RIGHT **OTHER**

4.

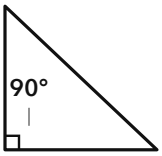


Figure 4

RIGHT **OTHER**

5.

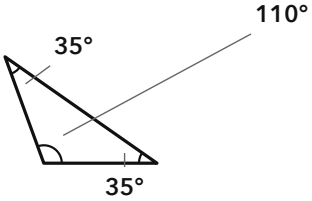


Figure 5

RIGHT **OTHER**

6.

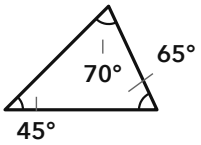


Figure 6

RIGHT **OTHER**

7.

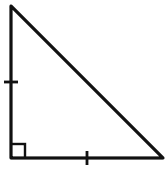


Figure 7

RIGHT **OTHER**

8.

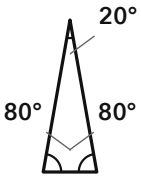


Figure 8

RIGHT **OTHER**

2 PROVE IT

Explain your thinking

Choose one figure from each group and explain how you know where each belongs.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Part 3, Make Your Own: Write three angle measures for one new RIGHT triangle and one new OTHER triangle.

RIGHT _____

OTHER _____

CHALLENGE

Challenge: Can an equilateral triangle be a right triangle? Explain using its angles.

ANSWER KEY

Spot the Corner

GRADE 5 · 5.G.B.21

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (right_triangle)	**RIGHT**	The marked corner is a 90° angle.
2	Figure 2 (polygon)	**RIGHT**	The horizontal and vertical sides meet at a 90° angle.
3	Figure 3 (equilateral)	**OTHER**	All three angles are 60°, so none is 90°.
4	Figure 4 (right_triangle)	**RIGHT**	One angle is labeled 90°.
5	Figure 5 (obtuse_triangle)	**OTHER**	Its angles are 110°, 35°, and 35°, with no 90° angle.
6	Figure 6 (triangle)	**OTHER**	All three labeled angles are smaller than 90°.
7	Figure 7 (polygon)	**RIGHT**	The horizontal and vertical sides meet at a 90° angle.
8	Figure 8 (isosceles)	**OTHER**	Its labeled angles are 80°, 80°, and 20°, with no 90° angle.

PART 2 · PROVE IT

Task: Choose one figure from each group and explain how you know where each belongs.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **RIGHT**: 90°, 55°, 35°
- **OTHER**: 75°, 60°, 45°

Challenge: No. An equilateral triangle has three 60° angles, so it has no 90° angle.

For Part 2, accept explanations that identify a 90° angle in the RIGHT figure and show that the OTHER figure has no 90° angle. For Part 3, each set of three angles must add to 180°.