Triangle Angle Sort

Look for the square corner.

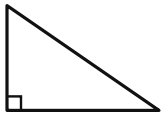
4.G.A.28 "Identify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. a. Describe right triangles as a category, and identify right triangles."

NAME _____ DATE _____

RIGHT TRIANGLE

A right triangle has one right angle. A small square marks the right angle in a drawing.

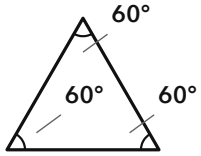
This triangle has a marked right angle.



NOT A RIGHT TRIANGLE

A triangle is not a right triangle if none of its angles is a right angle.

Each angle in this triangle is 60°, so it has no right angle.



1 SORT

8 items

Look at each figure and circle RIGHT or OTHER.

1.

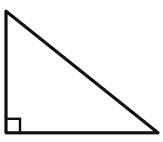


Figure 1

RIGHT OTHER

2.

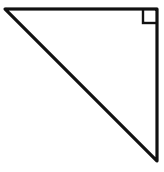


Figure 2

RIGHT OTHER

3.



Figure 3

RIGHT **OTHER**

4.

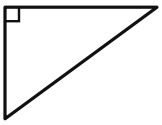


Figure 4

RIGHT **OTHER**

5.

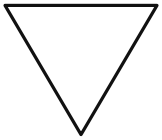


Figure 5

RIGHT **OTHER**

6.

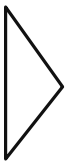


Figure 6

RIGHT **OTHER**

7.

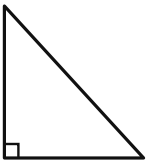


Figure 7

RIGHT **OTHER**

8.

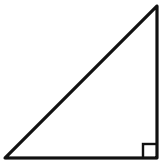


Figure 8

RIGHT **OTHER**

2 PROVE IT

Explain your thinking

Pick two figures from Part 1 and explain how you knew where each belongs.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Draw one new RIGHT triangle and one new OTHER triangle. Mark or label angles to show why each belongs.

RIGHT

OTHER

CHALLENGE

Draw a RIGHT triangle with two equal sides. Mark its right angle and its equal sides.

ANSWER KEY

Triangle Angle Sort

GRADE 4 · 4.G.A.28

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (polygon)	**RIGHT**	The horizontal and vertical sides meet at a marked right angle.
2	Figure 2 (polygon)	**RIGHT**	The square mark shows a right angle.
3	Figure 3 (polygon)	**OTHER**	The angle at the top is obtuse, and neither bottom angle is a right angle.
4	Figure 4 (polygon)	**RIGHT**	The square mark shows a right angle.
5	Figure 5 (polygon)	**OTHER**	All three angles are smaller than a right angle.
6	Figure 6 (polygon)	**OTHER**	The rightmost angle is obtuse, so the triangle has no right angle.
7	Figure 7 (polygon)	**RIGHT**	The square mark shows a right angle.
8	Figure 8 (polygon)	**RIGHT**	The square mark shows a right angle.

PART 2 · PROVE IT

Task: Pick two figures from Part 1 and explain how you knew 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**: A triangle with angles labeled 90°, 40°, and 50°, with the 90° angle marked by a small square.
- **OTHER**: A triangle with angles labeled 70°, 60°, and 50°.

Challenge: A triangle with a small square at the right angle and matching tick marks on the two sides that meet there.

RIGHT: 1, 2, 4, 7, 8. OTHER: 3, 5, 6. For Part 2, explanations should identify a right angle or explain that no angle is right.