Angle Sort

Compare each angle to a right angle.

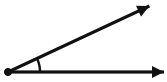
5.GM.3 "Understand angle, length, weight, and capacity as measurable attributes of real-world and mathematical objects, using various tools to measure them. Solve real-world problems of length..."

NAME _____ DATE _____

ACUTE ANGLE

An acute angle is smaller than a 90° right angle. You can compare it with the corner of a sheet of paper or measure it with a protractor.

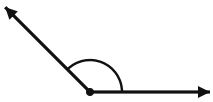
This 25° angle is acute.



OBTUSE ANGLE

An obtuse angle is larger than a 90° right angle but smaller than a straight angle.

This 135° angle is obtuse.



1 SORT

8 items

For each figure, circle ACUTE or OBTUSE; for Part 2, choose two figures and explain how you know each belongs in its category.

1.

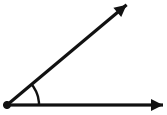


Figure 1

ACUTE OBTUSE

2.

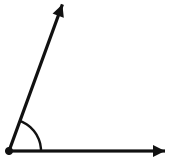


Figure 2

ACUTE OBTUSE

3.

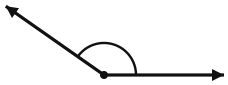


Figure 3

ACUTE **OBTUSE**

4.

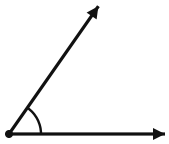


Figure 4

ACUTE **OBTUSE**

5.

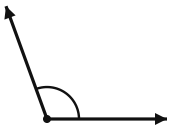


Figure 5

ACUTE **OBTUSE**

6.



Figure 6

ACUTE **OBTUSE**

7.

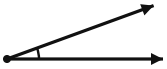


Figure 7

ACUTE **OBTUSE**

8.

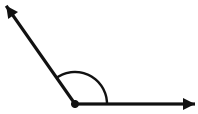


Figure 8

ACUTE **OBTUSE**

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Draw and label one new acute angle and one new obtuse angle. Write an estimated measure for each.

ACUTE

OBTUSE

CHALLENGE

Use < signs to place 90° between the two angle measures you wrote.

ANSWER KEY # Angle Sort

GRADE 5 · 5.GM.3

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (angle 40°)	**ACUTE**	40° is less than 90°.
2	Figure 2 (angle 70°)	**ACUTE**	70° is less than 90°.
3	Figure 3 (angle 145°)	**OBTUSE**	145° is greater than 90° and less than 180°.
4	Figure 4 (angle 55°)	**ACUTE**	55° is less than 90°.
5	Figure 5 (angle 110°)	**OBTUSE**	110° is greater than 90° and less than 180°.
6	Figure 6 (angle 160°)	**OBTUSE**	160° is greater than 90° and less than 180°.
7	Figure 7 (angle 20°)	**ACUTE**	20° is less than 90°.
8	Figure 8 (angle 125°)	**OBTUSE**	125° is greater than 90° and less than 180°.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **ACUTE**: A drawn 45° angle labeled ACUTE, with an estimated measure of 45°.
- **OBTUSE**: A drawn 120° angle labeled OBTUSE, with an estimated measure of 120°.

Challenge: 45° < 90° < 120°

For Part 2, accept explanations that correctly compare each chosen angle with 90°, whether students use a paper corner or a protractor. For Part 3, accept any drawings and estimates that match the two categories.