

Angle Size Sort

Compare angles to a right angle.

MA.4.GR.1.1 "Informally explore angles as an attribute of two-dimensional figures. Identify and classify angles as acute, right, obtuse, straight or reflex."

NAME _____

DATE _____

ACUTE ANGLE

An acute angle is smaller than a right angle. It measures more than 0° and less than 90° .

$\angle PQR$ measures 60° .

OBTUSE ANGLE

An obtuse angle is larger than a right angle but smaller than a straight angle. It measures more than 90° and less than 180° .

$\angle LMN$ measures 130° .

1 SORT

8 items

For Part 1, circle ACUTE or OBTUSE for each angle, then for Part 2, choose two item numbers and explain how each angle compares to a right angle.

- | | | |
|--|-----------------------------|------------------------------|
| 1. 1. An angle that measures 25° | ☐ ACUTE | ☐ OBTUSE |
| 2. 2. An angle that measures 120° | ☐ ACUTE | ☐ OBTUSE |
| 3. 3. An angle that measures 145° | ☐ ACUTE | ☐ OBTUSE |
| 4. 4. An angle that measures 80° | ☐ ACUTE | ☐ OBTUSE |
| 5. 5. An angle that measures 15° | ☐ ACUTE | ☐ OBTUSE |
| 6. 6. An angle that measures 105° | ☐ ACUTE | ☐ OBTUSE |
| 7. 7. An angle that measures 55° | ☐ ACUTE | ☐ OBTUSE |
| 8. 8. An angle that measures 89° | ☐ 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

Write one new acute-angle example and one new obtuse-angle example.

ACUTE _____

OBTUSE _____

CHALLENGE

Draw one acute angle and one obtuse angle, label each one, and explain how each compares to a right angle.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	1. An angle that measures 25°	ACUTE	25° is less than 90° .
2	2. An angle that measures 120°	OBTUSE	120° is greater than 90° and less than 180° .
3	3. An angle that measures 145°	OBTUSE	145° is greater than 90° and less than 180° .
4	4. An angle that measures 80°	ACUTE	80° is less than 90° .
5	5. An angle that measures 15°	ACUTE	15° is less than 90° .
6	6. An angle that measures 105°	OBTUSE	105° is greater than 90° and less than 180° .
7	7. An angle that measures 55°	ACUTE	55° is less than 90° .
8	8. An angle that measures 89°	ACUTE	89° is less than 90° .

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:** An angle that measures 40° .
- **OBTUSE:** An angle that measures 150° .

Challenge: Draw a 45° angle and label it acute because it is smaller than a right angle. Draw a 135° angle and label it obtuse because it is larger than a right angle.

Part 2 explanations should state that an acute angle is smaller than 90° or that an obtuse angle is greater than 90° and less than 180° . Accept different correct examples in Part 3 and the challenge.