Angle Openings

Compare each angle with a square corner.

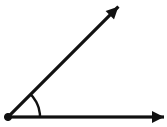
2.GM.1 "Analyze attributes of two- and three-dimensional figures and develop generalizations about their properties. Recognize regular and irregular trapezoids and hexagons. Describe, compare..."

NAME _____ DATE _____

SMALLER THAN A RIGHT ANGLE

A right angle looks like the corner of a square. A SMALL angle has a narrower opening.

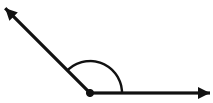
This opening is narrower than a square corner.



LARGER THAN A RIGHT ANGLE

A LARGE angle has a wider opening than a right angle.

This opening is wider than a square corner.



1 SORT

8 items

Circle SMALL or LARGE for each figure, then choose two figures and write how you know each fits its group.

1.

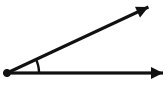


Figure 1

SMALL LARGE

2.

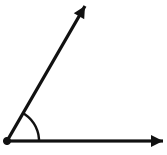


Figure 2

SMALL LARGE

3.

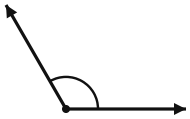


Figure 3

SMALL LARGE

4.

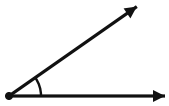


Figure 4

SMALL LARGE

5.



Figure 5

SMALL LARGE

6.

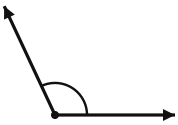


Figure 6

SMALL LARGE

7.

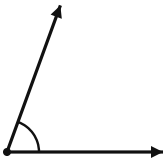


Figure 7

SMALL LARGE

8.

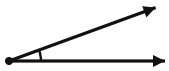


Figure 8

SMALL LARGE

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 one new SMALL angle and one new LARGE angle. Label each one.

SMALL

LARGE

CHALLENGE

Draw a right angle. Tell why it does not fit in either group.

ANSWER KEY

Angle Openings

GRADE 2 · 2.GM.1

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (angle 25°)	**SMALL**	Its opening is less than 90°.
2	Figure 2 (angle 60°)	**SMALL**	Its opening is less than 90°.
3	Figure 3 (angle 120°)	**LARGE**	Its opening is greater than 90°.
4	Figure 4 (angle 35°)	**SMALL**	Its opening is less than 90°.
5	Figure 5 (angle 155°)	**LARGE**	Its opening is greater than 90°.
6	Figure 6 (angle 115°)	**LARGE**	Its opening is greater than 90°.
7	Figure 7 (angle 70°)	**SMALL**	Its opening is less than 90°.
8	Figure 8 (angle 20°)	**SMALL**	Its opening 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)

- **SMALL**: A 50° angle labeled SMALL.
- **LARGE**: A 150° angle labeled LARGE.

Challenge: A 90° angle. It is the same size as a right angle, so it is not smaller or larger.

For Part 2, accept explanations that compare each chosen angle's opening with a right angle. For Part 3, accept clearly drawn angles narrower or wider than a right angle with the correct labels.