Angle Detective

Compare each opening to a right angle.

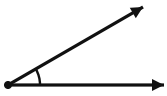
2.GM.1.5 "Recognize right angles and classify angles as smaller or larger than a right angle."

NAME _____ DATE _____

SMALLER THAN A RIGHT ANGLE

A right angle makes a square corner. An angle is smaller when its opening is tighter than that corner.

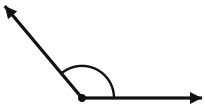
A tight opening



LARGER THAN A RIGHT ANGLE

An angle is larger when its opening is wider than a square corner.

A wide opening



1 SORT

8 items

Circle SMALL or LARGE for each figure, then pick one from each group and write how its opening compares to a right angle.

1.

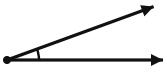


Figure 1

SMALL LARGE

2.

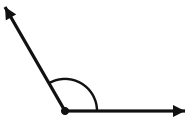


Figure 2

SMALL LARGE

3.

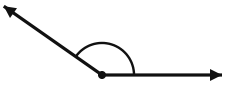


Figure 3

SMALL LARGE

4.

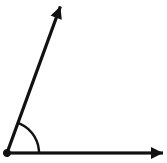


Figure 4

SMALL LARGE

5.

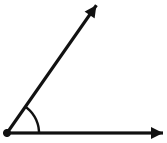


Figure 5

SMALL LARGE

6.



Figure 6

SMALL LARGE

7.

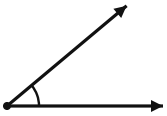


Figure 7

SMALL LARGE

8.

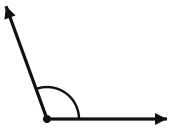


Figure 8

SMALL LARGE

2 PROVE IT

Explain your thinking

Pick one from each group and write how its opening compares to a right angle.

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, and label each drawing.

SMALL

LARGE

CHALLENGE

Draw an angle that is neither SMALL nor LARGE, and tell why.

ANSWER KEY

Angle Detective

GRADE 2 · 2.GM.1.5

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (angle 20°)	**SMALL**	Its opening is smaller than a right angle.
2	Figure 2 (angle 120°)	**LARGE**	Its opening is larger than a right angle.
3	Figure 3 (angle 145°)	**LARGE**	Its opening is larger than a right angle.
4	Figure 4 (angle 70°)	**SMALL**	Its opening is smaller than a right angle.
5	Figure 5 (angle 55°)	**SMALL**	Its opening is smaller than a right angle.
6	Figure 6 (angle 160°)	**LARGE**	Its opening is larger than a right angle.
7	Figure 7 (angle 40°)	**SMALL**	Its opening is smaller than a right angle.
8	Figure 8 (angle 110°)	**LARGE**	Its opening is larger than a right angle.

PART 2 · PROVE IT

Task: Pick one from each group and write how its opening compares to a right angle.
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 15° angle labeled SMALL.
- **LARGE**: A 150° angle labeled LARGE.

Challenge: A right angle, with the explanation: Its opening is equal to a square corner, so it is neither smaller nor larger.

For the explanations, accept comparisons to a square corner or right angle. For example, Figure 1 is tighter than a square corner, while Figure 2 is wider.