

Angle Action

Measure, name, and sketch angle openings.

GRADE 4 • MA.4.GR.1

MA.4.GR.1 "Draw, classify and measure angles."

NAME _____

DATE _____

ANGLE CLUES

Measure an angle in degrees by reading the number where the second ray crosses a protractor. An acute angle is smaller than a right angle, a right angle is a square corner, an obtuse angle is wider than a right angle but narrower than a straight angle, and a straight angle makes a line.

WORKED EXAMPLE

A protractor shows an angle of 135° .
Classify the angle.

1. Read the angle as 135° .
2. Compare the opening with a right angle and a straight angle.
3. The opening is wider than a right angle and narrower than a straight angle.

Answer: 135° , obtuse angle

PRACTICE 6 problems

- 1** Sketch an acute angle and label it 35° .

ANSWER _____

- 2** An angle measures 84° . Classify it.

ANSWER _____

- 3** An angle measures 118° . Classify it.

ANSWER _____

- 4** A protractor starts at 0° on one ray. The other ray meets 179° . What is the angle measure and type?

ANSWER _____

- 5** What angle do the hands of a clock make at 6:00? Classify it.

ANSWER _____

- 6** A paper spinner turns one quarter-turn. How many degrees does it turn? Classify the turn.

ANSWER _____

APPLY IT Show your work

- 1** Mara opens a craft-box lid so the lid makes a 142° angle with the box. Classify the opening.

WORK SPACE

ANSWER _____

- 2** At a skate park, Niko turns his scooter one quarter-turn, then another quarter-turn in the same direction. How many degrees has he turned? Classify the turn.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A straight angle is split into three adjacent angles. Two angles measure 48° and 67° . Find the measure of the third angle and classify it. Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Sketch an acute angle and label it 35° .	A 35° acute-angle sketch.
2	An angle measures 84° . Classify it.	acute angle
3	An angle measures 118° . Classify it.	obtuse angle
4	A protractor starts at 0° on one ray. The other ray meets 179° . What is the angle measure and type?	179°, obtuse angle
5	What angle do the hands of a clock make at 6:00? Classify it.	180°, straight angle
6	A paper spinner turns one quarter-turn. How many degrees does it turn? Classify the turn.	90°, right angle

PART 2 • APPLY IT

- obtuse angle** 142° is wider than a right angle and narrower than a straight angle, so the opening is obtuse.
- 180° , straight angle** Each quarter-turn is 90° , so $90^\circ + 90^\circ = 180^\circ$. A 180° turn is a straight angle.

CHALLENGE

65° , acute angle. A straight angle is 180° , and $180^\circ - 48^\circ - 67^\circ = 65^\circ$.

Accept correct angle type names with or without the word angle. For the sketch, accept any clearly acute opening labeled 35° .