

Angle Tool Detectives

Choose the best tool for each angle job.

GRADE 5 • 5.MG.3.e

5.MG.3.e "Identify the appropriate tools (e.g., protractor, straightedge, angle ruler, available technology) to measure and draw angles."

NAME _____

DATE _____

PICK THE RIGHT TOOL

Use a protractor or angle ruler when you need to measure or mark degrees. Use a straightedge or ruler to draw straight rays and lines. A virtual protractor on a device can also measure an angle when technology is available.

WORKED EXAMPLE

You need to draw an angle that measures 72° . Which tools will you use?

1. Choose a protractor to find and mark 72° .
2. Use a straightedge to draw the first ray.
3. Line up the protractor with the first ray and make a mark at 72° .
4. Use the straightedge to draw a second ray through the mark.

Answer: Use a protractor and a straightedge.

PRACTICE 6 problems

- 1** An angle on a poster has no degree label. You need to find whether it measures 64° . Which tool should you use?

ANSWER _____

- 2** You need to draw a 35° angle for a design. Which tools should you use?

ANSWER _____

- 3** A tablet shows an angle that measures 108° . Which available technology tool could you use to check the measure?

ANSWER _____

- 4** Mia has already marked where a 145° angle should go. Which tool should she use to draw the two straight rays?

ANSWER _____

- 5** You want to check whether a corner is a 90° angle. Which tool should you use?

ANSWER _____

- 6** You need to draw a 180° straight angle. Which tool is most useful for drawing the straight line?

ANSWER _____

APPLY IT Show your work

- 1** At robotics club, Evan must draw a route that turns 120° at a checkpoint. He needs to make straight path lines and mark the turn exactly. Which tools should Evan choose?

WORK SPACE

ANSWER _____

- 2** Leila is making a comic panel. She wants to check whether one corner is a 90° angle before she inks it. She can use an angle ruler, a paintbrush, or scissors. Which tool should she choose?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A museum app shows two turns, 38° and 142° . Drew must sketch both turns on paper with rays that are each 5 cm long. Name the tools Drew should use and explain what each tool does.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	An angle on a poster has no degree label. You need to find whether it measures 64° . Which tool should you use?	A protractor or angle ruler.
2	You need to draw a 35° angle for a design. Which tools should you use?	A protractor and a straightedge.
3	A tablet shows an angle that measures 108° . Which available technology tool could you use to check the measure?	A virtual protractor.
4	Mia has already marked where a 145° angle should go. Which tool should she use to draw the two straight rays?	A straightedge or ruler.
5	You want to check whether a corner is a 90° angle. Which tool should you use?	A protractor or angle ruler.
6	You need to draw a 180° straight angle. Which tool is most useful for drawing the straight line?	A straightedge or ruler.

PART 2 • APPLY IT

1. **A protractor and a straightedge.** Use the protractor to mark the 120° turn. Use the straightedge to draw the two straight path lines.
2. **An angle ruler.** An angle ruler measures angles, including a 90° angle. A paintbrush and scissors do not measure angles.

CHALLENGE

Use a protractor or angle ruler to measure and mark 38° and 142° . Use a ruler to measure 5 cm and draw the straight rays.

Accept ruler for straightedge. Accept a protractor, angle ruler, or virtual protractor when the task is to measure or mark degree measures, if the tool named fits the situation.