

# Grade 4 - Measuring and Drawing Angles - Test Answer Key

Common Core 4.MD.C.5, 4.MD.C.6, 4.MD.C.7 · [maths-pdf.fr/en/](https://maths-pdf.fr/en/)

Use this answer key to score the test out of 20 points. Each solution shows the correct work, and the scoring note explains how to give partial credit, including how close a measured or drawn angle must be.

**Grade 4** · Common Core State Standards: **4.MD.C.5, 4.MD.C.6, 4.MD.C.7**

## Question 1 - Turns and degrees [2 pts]

- a.  $360 \div 4 = 90^\circ$
- b.  $3 \times 90 = 270^\circ$

*Scoring: 1 point for each correct answer with the degree sign or the word degrees.*

## Question 2 - Classify angles [2 pts]

- a.  $62^\circ$  is less than  $90^\circ$ : **acute**
- b.  $108^\circ$  is greater than  $90^\circ$ : **obtuse**

*Scoring: 1 point for each correct classification.*

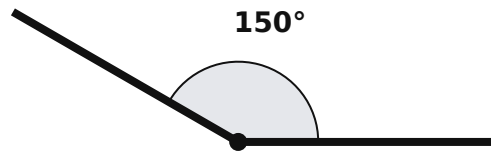
## Question 3 - Use the protractor [2 pts]

- a. The ray crosses 65 on the scale that starts at 0:  **$65^\circ$**
- b. 65 is less than 90: **acute**

*Scoring: 1 point for the measure (accept  $63^\circ$  to  $67^\circ$ ), 1 point for the classification that matches the answer.*

## Question 4 - Draw an angle [2 pts]

Place the protractor on the vertex, mark 150 on the scale, and draw a ray through the mark.

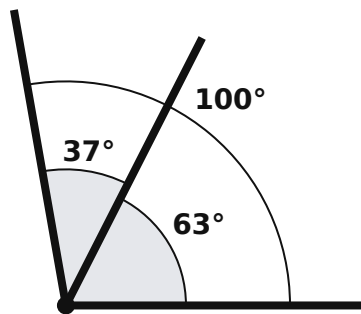


A  $150^\circ$  angle.

Scoring: 1 point for a second ray starting at the vertex, 1 point for an angle within 5 degrees of  $150^\circ$ .

### Question 5 - Split angle [3 pts]

- a.  $100 - 63 = 37^\circ$ . Check:  $63 + 37 = 100$ .
- b.  $100^\circ$  is greater than  $90^\circ$ : **obtuse**

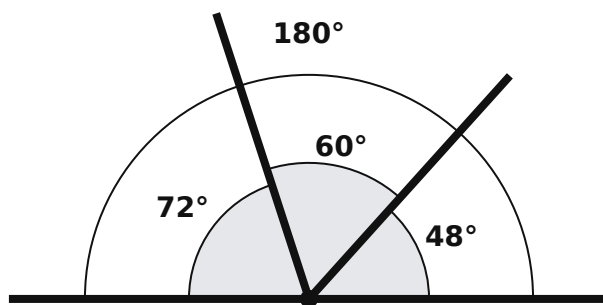


$$63 + 37 = 100.$$

Scoring: part a, 1 point for subtracting and 1 point for the correct angle. Part b, 1 point.

### Question 6 - Angles on a line [3 pts]

- a.  $48 + 72 = 120$ , and  $180 - 120 = 60$ .  $x = 60^\circ$ .
- b.  $60^\circ$  is less than  $90^\circ$ : **acute**



$$48 + 60 + 72 = 180.$$

Scoring: part a, 1 point for adding the known angles and 1 point for the correct x. Part b, 1 point.

### Question 7 - Pizza party [3 pts]

- a.  $360 \div 12 = 30^\circ$
- b.  $5 \times 30 = 150^\circ$
- c. 7 slices are left:  $7 \times 30 = 210^\circ$ . Check:  $150 + 210 = 360$ .

Scoring: 1 point for each correct part.

### Question 8 - Clock turns [3 pts]

- a.  $7 \times 30 = 210^\circ$
- b.  $360 - 210 = 150^\circ$
- c. From 12 to 4 is  $4 \times 30 = 120^\circ$

Scoring: 1 point for each correct part.

**Total**

**20 points**