

Grade 4 · Measuring and Adding Angles · Test

Common Core 4.MD.C.5, 4.MD.C.6, 4.MD.C.7 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

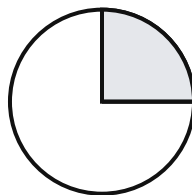
This test covers standards 4.MD.C.5, 4.MD.C.6, and 4.MD.C.7. You need a protractor and a pencil. The 9 questions are worth 20 points in all. Show your work for every question that asks for an equation. Allow 45 minutes.

Test information

- **Grade:** Grade 4
- **Chapter:** Measuring and Adding Angles
- **Common Core:** 4.MD.C.5, 4.MD.C.6, 4.MD.C.7
- **Time:** 45 minutes
- **Total:** 20 points (Question 1: 2 pts; Question 2: 2 pts; Question 3: 2 pts; Question 4: 2 pts; Question 5: 3 pts; Question 6: 2 pts; Question 7: 3 pts; Question 8: 2 pts; Question 9: 2 pts)

Question 1: Turns and degrees (2 points)

Use the circle.



1/4 turn

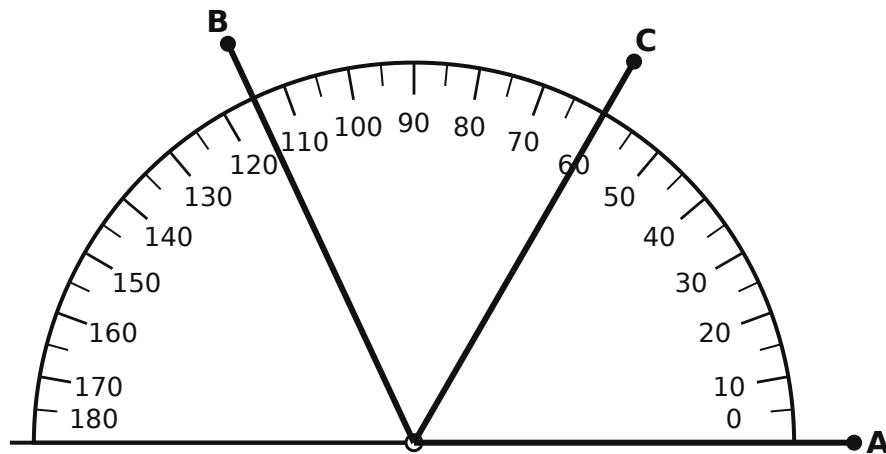
- Write the number of degrees in a half turn. (1 point)
- Write the fraction of a circle that an angle of 90° turns through. (1 point)

Question 2: One-degree angles (2 points)

- An angle opens through 110 one-degree angles. Write its measure. (1 point)
- An angle measures 60° . Write the number of one-degree angles that make it. (1 point)

Question 3: Reading a protractor (2 points)

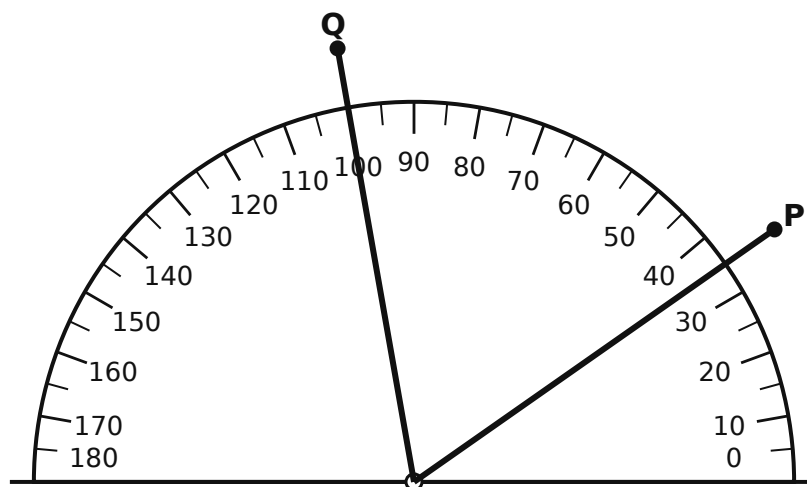
Use the protractor. Ray A lies on the 0 mark.



- a. Find the measure of the angle formed by rays A and C. (1 point)
- b. Find the measure of the angle formed by rays A and B. (1 point)

Question 4: Rays not on zero (2 points)

Find the measure of the angle formed by rays P and Q. Show how you found it.



Question 5: Draw an angle (3 points)

Use a protractor to draw an angle of 70° with the vertex at the dot and the ray shown as one

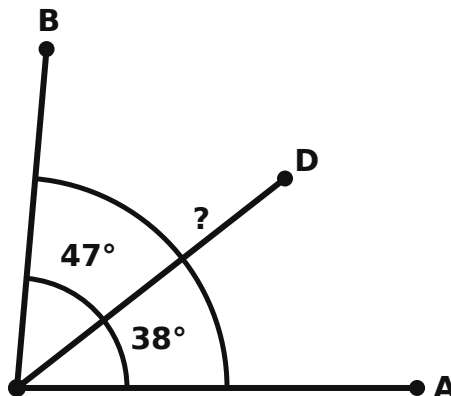
side.



- Draw the angle. (2 points)
- Label the angle with its measure. (1 point)

Question 6: Adding angle measures (2 points)

Ray OD splits angle AOB into two angles. Find the measure of angle AOB.

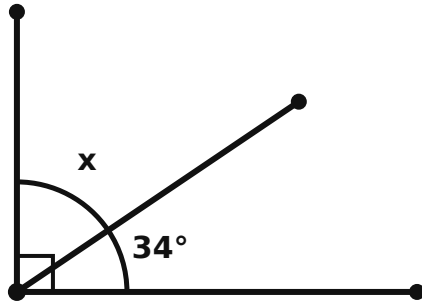


- Write an equation. (1 point)
- Solve it. (1 point)

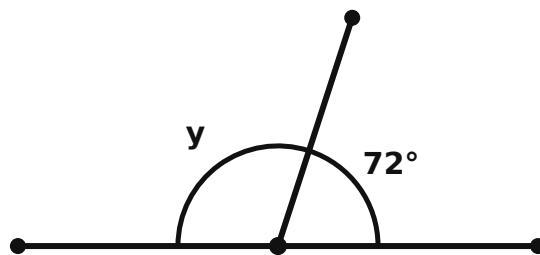
Question 7: Unknown angles (3 points)

Find the measure of each unknown angle.

- The square corner measures 90° . Find x . (1 point)



b. The angles on the straight line add up to 180° . Write an equation and find y . (2 points)

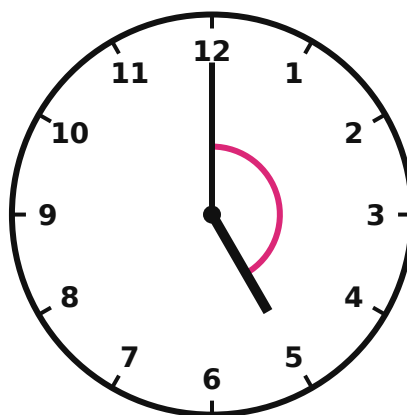


Question 8: Equation with a letter (2 points)

Angle ABC measures 142° . Ray BD splits it into angle ABD, which measures 87° , and angle DBC. Write an equation with a letter for the measure of angle DBC and solve it.

Question 9: Angle on a clock (2 points)

The 12 numbers on a clock are equally spaced. Use the clock showing 5:00.



- a. Find the measure of the angle formed by the hands. *(1 point)*
- b. Find how many degrees greater it is than a quarter turn. *(1 point)*