

Grade 3 · Area · Test

Common Core 3.MD.C.5, 3.MD.C.6, 3.MD.C.7 · mathovore.fr

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

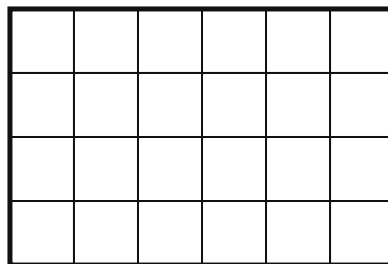
This test has 9 questions worth 20 points in all. It covers unit squares, area of rectangles, missing sides, the distributive property and L-shaped figures. Students should take about 45 minutes and show their work.

Test information

- **Grade:** Grade 3
- **Chapter:** Area
- **Common Core:** 3.MD.C.5, 3.MD.C.6, 3.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: 2 pts; Question 6: 3 pts; Question 7: 2 pts; Question 8: 2 pts; Question 9: 3 pts)

Question 1: Counting unit squares (2 points)

The rectangle is covered with unit squares. Each square is 1 square centimeter.



A rectangle covered with unit squares.

- Find the area of the rectangle. (1 point)
- Write a multiplication sentence for the area. (1 point)

Question 2: Area with units (2 points)

Find the area of each figure.

- a. A rectangle that is 9 inches long and 4 inches wide. (1 point)
- b. A square with sides of 6 centimeters. (1 point)

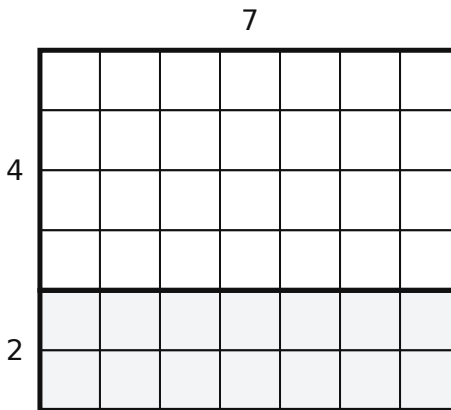
Question 3: Missing side lengths (2 points)

Find the missing side length.

- a. A rectangle has an area of 63 square feet and a width of 7 feet. Find the length. (1 point)
- b. A rectangle has an area of 72 square meters and a length of 8 meters. Find the width. (1 point)

Question 4: Splitting a rectangle (2 points)

The rectangle is 7 units wide. Each square is 1 square unit.



A rectangle split into two parts.

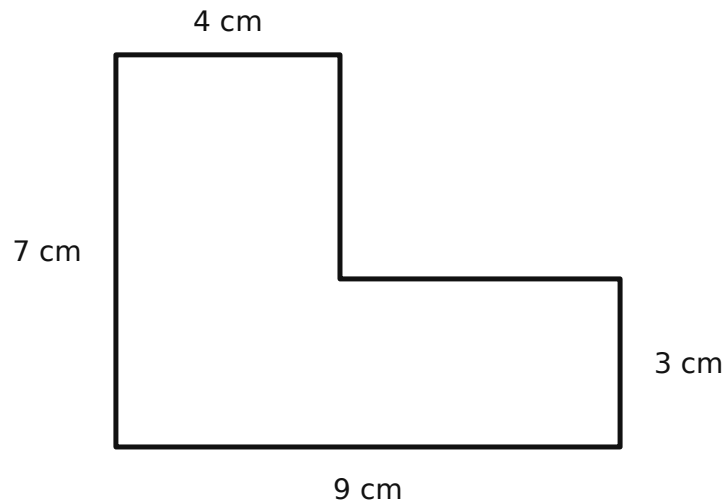
- a. Find the area of the top part and the area of the bottom part. (1 point)
- b. Find the area of the whole rectangle. (1 point)

Question 5: Distributive property (2 points)

Use the fact that $8 = 5 + 3$ to find 7×8 . Write the two products and the total.

Question 6: Area of an L-shape (3 points)

Find the area of the figure. All corners are square corners.



An L-shaped figure with labeled sides.

Show your work.

Question 7: Compare two rectangles (2 points)

Rectangle A is 11 feet long and 4 feet wide. Rectangle B is 7 feet long and 6 feet wide. Which rectangle has the greater area, and by how many square feet?

Question 8: Mulch for a garden (2 points)

Sofia's rectangular garden is 12 feet long and 5 feet wide. One bag of mulch covers 10 square feet. How many bags does she need to cover the whole garden?

Question 9: Same area (3 points)

A rectangle has an area of 24 square units and whole-number side lengths.

- If the length is 8 units, find the width. (1 point)
- Give two other pairs of side lengths that a rectangle with area 24 square units could have. (2 points)