

Grade 3 · Area · Quiz

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

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

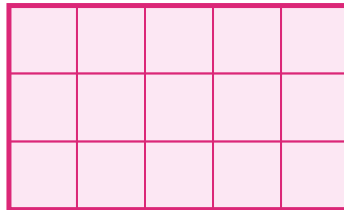
Ten multiple-choice questions on area: counting unit squares, multiplying side lengths, finding missing sides, the distributive property and L-shapes. Pick the one correct answer for each question, then read the explanation.

Grade 3 Common Core: 3.MD.C.5 · 3.MD.C.6 · 3.MD.C.7

Questions

Question 1

What is the area of the rectangle? Each square is 1 square centimeter.



A rectangle covered with unit squares.

- A. 8 square centimeters
- B. 16 square centimeters
- C. 30 square centimeters
- D. 15 square centimeters

Question 2

A rectangle is 6 feet long and 4 feet wide. Which tells its area?

- A. 24 feet
- B. 10 square feet
- C. 24 square feet
- D. 20 feet

Question 3

Find the area of a rectangle that is 9 meters long and 6 meters wide.

- A. 45 square meters

- B. 54 square meters
- C. 30 square meters
- D. 15 square meters

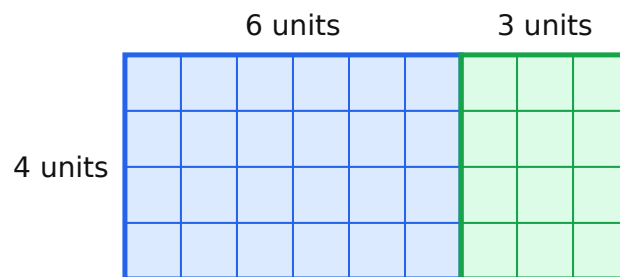
Question 4

A rectangle has an area of 42 square inches and a length of 7 inches. What is its width?

- A. 35 inches
- B. 49 inches
- C. 6 inches
- D. 7 inches

Question 5

Which expression gives the area of the whole rectangle?



A rectangle split into two parts.

- A. $4 \times 6 + 4 \times 3$
- B. $4 \times 6 + 3$
- C. $4 + 6 + 3$
- D. $4 + 6 \times 3$

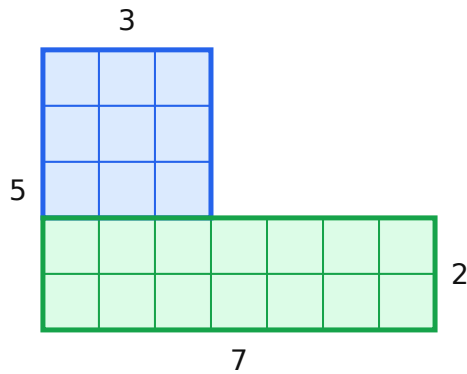
Question 6

Which expression equals 7×8 ?

- A. $(7 \times 5) + 3$
- B. $(7 + 5) \times (7 + 3)$
- C. $(7 \times 5) \times (7 \times 3)$
- D. $(7 \times 5) + (7 \times 3)$

Question 7

What is the area of the figure? All corners are square corners and all numbers are in units.



An L-shaped figure.

- A. 23 square units
- B. 35 square units
- C. 17 square units
- D. 21 square units

Question 8

Rectangle A is 9 feet by 4 feet. Rectangle B is 6 feet by 6 feet. Which statement is true?

- A. Rectangle A has the greater area.
- B. They have the same area.
- C. Rectangle B has the greater area.
- D. Not enough information to tell.

Question 9

Which rectangle has an area of 24 square units?

- A. 4 by 7
- B. 3 by 8
- C. 5 by 5
- D. 2 by 10

Question 10

Ethan's rectangular garden is 8 feet by 5 feet. One seed packet covers 4 square feet. How many packets cover the whole garden?

- A. 13 packets
- B. 26 packets
- C. 160 packets
- D. 10 packets

Answer key

1. **D** - There are 3 rows of 5 squares, and $3 \times 5 = 15$. Adding $3 + 5 = 8$ is a common mistake.
2. **C** - Area is length times width: $6 \times 4 = 24$, measured in square feet. Adding the sides gives 10, which is not the area.
3. **B** - $9 \times 6 = 54$. The answer 15 comes from adding the sides, and 45 comes from the wrong fact 9×5 .
4. **C** - Ask $7 \times ? = 42$. Since $7 \times 6 = 42$, the width is 6 inches. Subtracting $42 - 7 = 35$ is a mistake.
5. **A** - Each part has height 4, so the parts have areas 4×6 and 4×3 . Add the two areas: $24 + 12 = 36$.
6. **D** - Break 8 into $5 + 3$ and multiply each part by 7: $35 + 21 = 56$. Only one multiplication is allowed on each part.
7. **A** - Split into $3 \times 3 = 9$ and $7 \times 2 = 14$, then $9 + 14 = 23$. Using $7 \times 5 = 35$ counts the empty corner too.
8. **B** - A has $9 \times 4 = 36$ square feet and B has $6 \times 6 = 36$ square feet. Different side lengths can give the same area.
9. **B** - $3 \times 8 = 24$. The other choices have areas of 28, 25 and 20 square units.
10. **D** - The area is $8 \times 5 = 40$ square feet, and $40 \div 4 = 10$. Adding the sides or finding the distance around gives wrong answers.

Remember:

- A unit square has sides 1 unit long and an area of 1 square unit.
- Area is measured in square units such as sq cm, sq in, sq ft and sq m.
- Area of a rectangle = length times width, which is rows times columns.
- A rectangle can be split into parts, and the whole area is the sum of the part areas.
- To find the area of an L-shape, split it into rectangles and add their areas.