

Grade 3 - Area - Test Answer Key

Common Core 3.MD.C.5, 3.MD.C.6, 3.MD.C.7 · maths-pdf.fr/en/

This **area test answers** for 3rd Grade covers area (Common Core 3.MD.C.5, 3.MD.C.6, 3.MD.C.7), with a free PDF to print.

This answer key gives the worked solution and the scoring guide for each question of the area test. The total is 20 points. Give credit for any correct method, and take off a point when the square units are missing from a final answer.

Grade 3 · Common Core State Standards: **3.MD.C.5, 3.MD.C.6, 3.MD.C.7**

Area test answers: worked solutions

Question 1 - Count the squares [2 pts]

- a. There are 20 squares (4 rows of 5).
- b. $4 \times 5 = 20$. Area: 20 square units.

Scoring: 1 point for 20 squares. 1 point for a correct sentence, such as $4 \times 5 = 20$ or $5 \times 4 = 20$.

Question 2 - Area of rectangles [2 pts]

- a. $12 \times 5 = 60$. Area: 60 square centimeters.
- b. $9 \times 9 = 81$. Area: 81 square inches.

Scoring: 1 point per part. Half credit is not given; the unit must be square units.

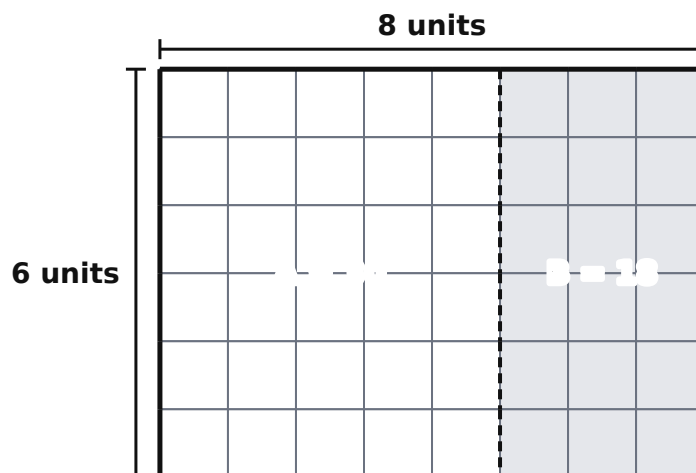
Question 3 - Find the missing side [2 pts]

- a. $8 \times 7 = 56$. Width: 7 feet.
- b. $9 \times 8 = 72$. Length: 8 meters.

Scoring: 1 point for each correct side with its unit.

Question 4 - Split the rectangle [2 pts]

- a. A: $5 \times 6 = 30$. B: $3 \times 6 = 18$.
 b. $30 + 18 = 48$. Area: 48 square units.

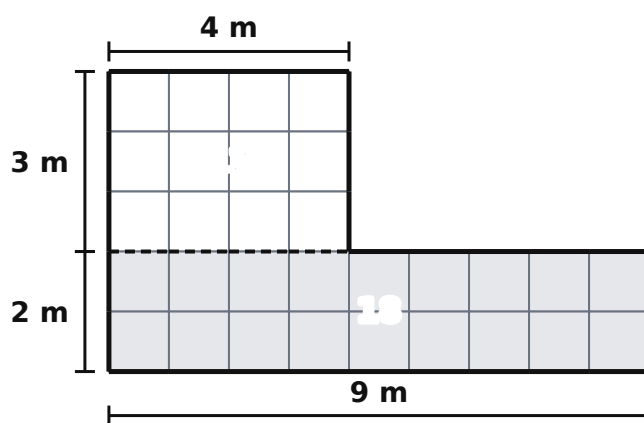


A is 30 and B is 18.

Scoring: 1 point for both areas. 1 point for the sum 48 with units.

Question 5 - L-shaped garden [3 pts]

Top: $4 \times 3 = 12$. Bottom: $9 \times 2 = 18$.



Top 12, bottom 18.

Total: $12 + 18 = 30$. Area: 30 square meters.

Scoring: 1 point for splitting the shape into two rectangles. 1 point for both correct areas. 1 point for the total with units.

Question 6 - Patio tiles [3 pts]

- a. $14 \times 6 = 84$ tiles.
- b. $84 \times \$3 = \$252$. Cost: \$252.

Scoring: 1 point for 84. 1 point for multiplying 84 by 3. 1 point for \$252.

Question 7 - Same area [2 pts]

$1 \times 24 = 24$; $2 \times 12 = 24$; $3 \times 8 = 24$; $4 \times 6 = 24$.

The pairs are 1 by 24, 2 by 12, 3 by 8, and 4 by 6.

Scoring: 2 points for all four pairs. 1 point for two or three correct pairs and no wrong pairs.

Question 8 - Does order matter? [2 pts]

No. $7 \times 9 = 63$ and $9 \times 7 = 63$. Multiplying in either order gives the same product, so the two rectangles have the same area, 63 square units.

Scoring: 1 point for saying no. 1 point for a correct explanation with the products.

Question 9 - Two flower beds [2 pts]

$7 \times 4 = 28$ and $5 \times 3 = 15$.

$28 + 15 = 43$. Total area: 43 square yards.

Scoring: 1 point for both areas. 1 point for the total with units.

Total score
Total
20 points
Key facts behind this area test answers
Key facts

- A unit square has sides 1 unit long and an area of 1 square unit.
- Rectangle area = length $\times$ width (rows times squares in each row).
- Area is always written in square units, such as square feet.
- The distributive property splits a big rectangle into two small ones: $8 \times 6 = (5 \times 6) + (3 \times 6)$.
- Find the area of an L-shape by cutting it into rectangles and adding.

How to use this area test answers

Score your test with the point values shown for each question. Then read the worked solution of every question where you lost points and note the method to review.