

Grade 3 - Area - Answer Key

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

This **area practice solutions** 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.

Here are the full solutions to all 20 area problems. Check each answer, and then look at the picture or multiplication fact if a result is different from yours. Every final answer is in bold and has its square units.

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

Area practice solutions: exercises 1 to 10

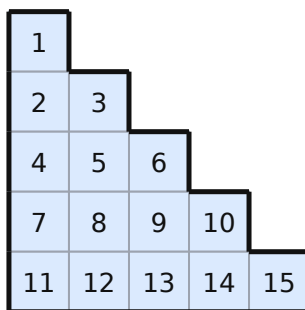
Exercise 1 - Count unit squares

There are 3 rows with 6 squares in each row. Count: 6, 12, 18.

Area: **18 square units**.

Exercise 2 - Staircase area

The rows have 1, 2, 3, 4, and 5 squares. Add: $1+2+3+4+5=15$.



Numbered staircase.

Area: **15 square units**.

Exercise 3 - Square-inch tiles

$$2 \times 9 = 18.$$

Area: **18 square inches.**

Exercise 4 - Area from sides

$$13 \times 3 = 39.$$

Area: **39 square feet.**

Exercise 5 - Labeled rectangle

$$9 \times 5 = 45.$$

Area: **45 square meters.**

Exercise 6 - Square area

A square has equal sides, so multiply $7 \times 7 = 49$.

Area: **49 square inches.**

Exercise 7 - Array and multiplication

There are 3 rows and 8 columns: $3 \times 8 = 24$.

Area: **24 square units.**

Exercise 8 - Missing side

Think: $4 \times ? = 36$. Since $4 \times 9 = 36$, the length is 9 cm.

Length: **9 centimeters.**

Exercise 9 - Same area, new order

$6 \times 9 = 54$ and $9 \times 6 = 54$.

Neither. Both areas are 54 square units.

Exercise 10 - Break apart a fact

Since $7 = 5 + 2$, the missing number is 2.

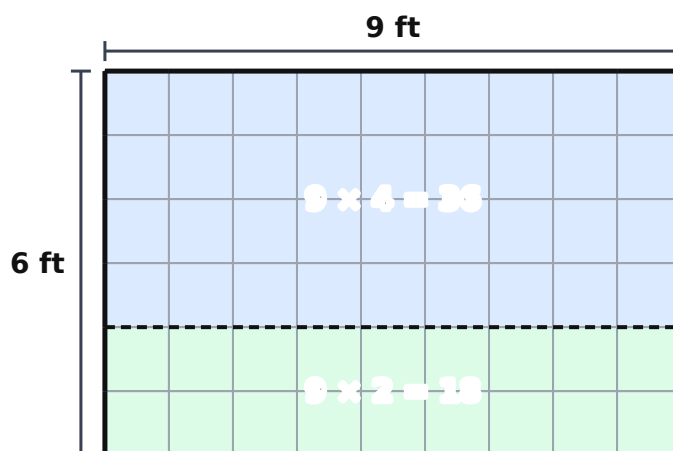
$8 \times 5 = 40$ and $8 \times 2 = 16$, so $40 + 16 = 56$.

Product: **56**.

Exercises 11 and up

Exercise 11 - Split rectangle

Top: $9 \times 4 = 36$. Bottom: $9 \times 2 = 18$.



Top part 36, bottom part 18.

Total: $36 + 18 = 54$. Check: $9 \times 6 = 54$.

Area: **54 square feet**.

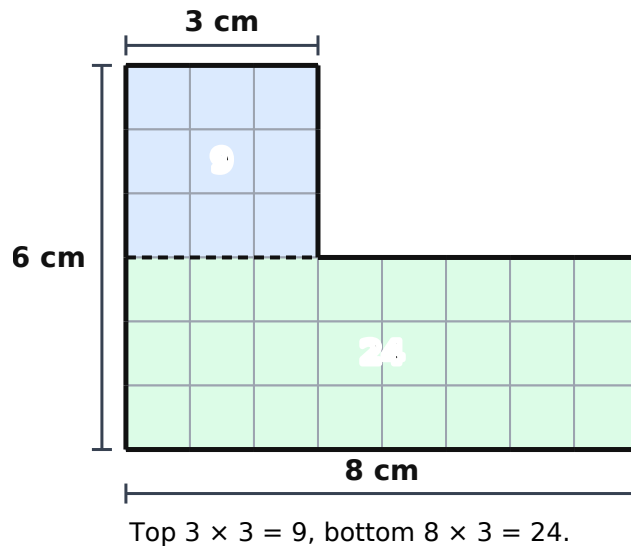
Exercise 12 - Distributive property

$5 \times (6 + 3) = (5 \times 6) + (5 \times 3) = 30 + 15 = 45$.

Value: **45**.

Exercise 13 - L-shaped figure

Top rectangle: $3 \times 3 = 9$. Bottom rectangle: $8 \times 3 = 24$.



Total: $9 + 24 = 33$.

Area: **33 square centimeters**.

Exercise 14 - Rug area

$8 \times 5 = 40$.

The rug covers **40 square feet**.

Exercise 15 - Garden bed

$11 \times 6 = 66$.

Area: **66 square yards**.

Exercise 16 - Tiles for a wall

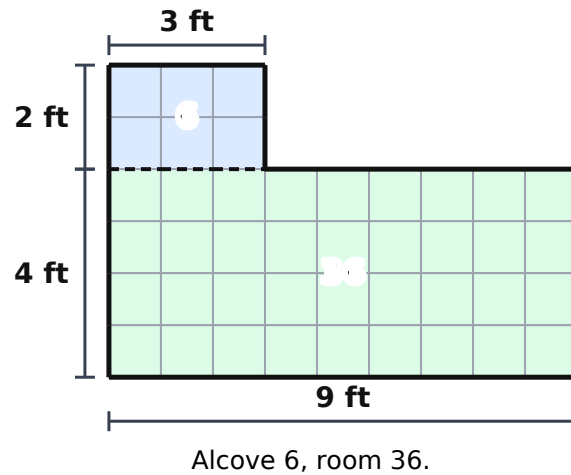
Tiles needed: $9 \times 4 = 36$.

Cost: $36 \times \$2 = \$72$.

Total cost: **\$72**.

Exercise 17 - Room with an alcove

Alcove: $3 \times 2 = 6$. Room: $9 \times 4 = 36$.



Total: $6 + 36 = 42$.

Floor area: **42 square feet**.

Exercise 18 - Poster width

$7 \times ? = 63$. Since $7 \times 9 = 63$, the height is 9.

Height: **9 inches**.

Exercise 19 - Compare two rectangles

Diego: $12 \times 4 = 48$. Aisha: $7 \times 7 = 49$.

$49 - 48 = 1$.

Aisha's square is larger by 1 square unit.

Exercise 20 - Painting two walls

One wall: $10 \times 8 = 80$. Two walls: $80 + 80 = 160$.

Total: **160 square feet.**

Key facts behind this area practice solutions

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 practice solutions

Cover each solution, solve the exercise again, then uncover it and compare every line. If your answer differs, find the first step that changed and redo the exercise from there.