

Grade 4 - Area and Perimeter of Rectangles - Test Answer Key

Common Core 4.MD.A.3 · maths-pdf.fr/en/

Use this answer key to score the test out of 20 points. Each worked solution is followed by a scoring note that explains how many points to give, including partial credit for correct steps and for correct units.

Grade 4 · Common Core State Standards: **4.MD.A.3**

Question 1 - Rectangle measures [2 pts]

- a. $11 \times 4 = 44$ sq in
- b. $2 \times 11 + 2 \times 4 = 22 + 8 = 30$ in

Scoring: 1 point for each correct answer. Take off the point if the unit is missing or area is given in plain units.

Question 2 - Square measures [2 pts]

- a. $7 \times 7 = 49$ sq m
- b. $4 \times 7 = 28$ m

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

Question 3 - Find the length [2 pts]

$63 \div 7 = 9$. The length is **9 ft**.

Scoring: 1 point for dividing the area by the width, 1 point for the correct length with its unit.

Question 4 - Find the width [2 pts]

$2 \times 11 = 22$, and $38 - 22 = 16$. Then $16 \div 2 = 8$. The width is **8 in**.

Scoring: 1 point for finding the total of the two widths (16), 1 point for the correct width.

Question 5 - Missing measures table [3 pts]

A: (a) $8 \times 5 = 40$ sq ft; (b) $2 \times 8 + 2 \times 5 = 26$ ft.

B: (c) $54 \div 9 = 6$ ft.

C: $24 - 2 \times 4 = 16$, and $16 \div 2 = 8$, so (d) is 8 ft.

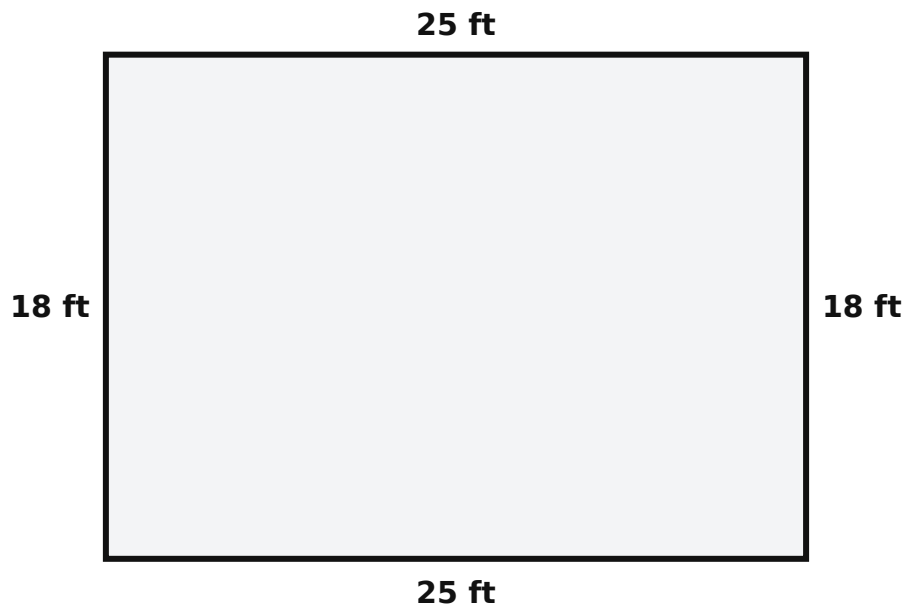
(a) 40 sq ft; (b) 26 ft; (c) 6 ft; (d) 8 ft

Scoring: 1 point for row A (both values correct), 1 point for row B, 1 point for row C.

Question 6 - Backyard fence [3 pts]

a. $2 \times 25 + 2 \times 18 = 50 + 36 = 86$ ft

b. $86 \times 4 = 344$ dollars: **\$344**



$$25 + 18 + 25 + 18 = 86.$$

Scoring: part a, 1 point. Part b, 1 point for multiplying the perimeter by 4 and 1 point for the correct cost.

Question 7 - Rug on the floor [3 pts]

a. $12 \times 10 = 120$ sq ft

b. $9 \times 6 = 54$ sq ft

c. $120 - 54 = 66$ sq ft

120 sq ft

54	66
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Room area split.

Scoring: 1 point for each correct area or difference, with square units.

Question 8 - Same perimeter [3 pts]

- a. A: $2 \times 7 + 2 \times 3 = 20$ ft. B: $4 \times 5 = 20$ ft.
- b. A: $7 \times 3 = 21$ sq ft. B: $5 \times 5 = 25$ sq ft.
- c. B is greater by $25 - 21 = 4$ sq ft.

Scoring: 1 point for both perimeters, 1 point for both areas, 1 point for naming B and the difference of 4 sq ft.

Total

20 points