

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

Common Core 4.MD.A.3 · mathovore.fr

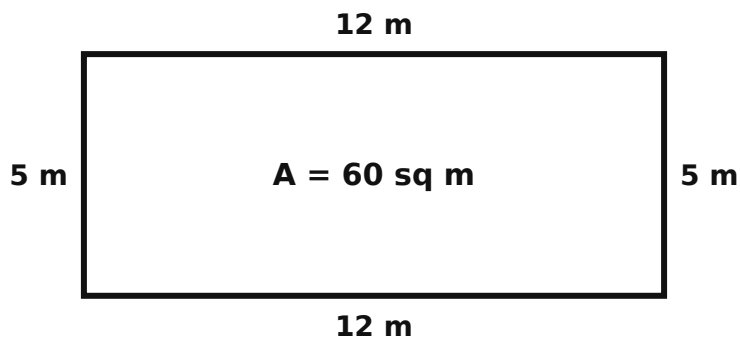
Use this answer key to score the area and perimeter test out of 20 points. Every solution shows the formula and the calculation, and the scoring note explains how to award each point and when to give partial credit.

Grade 4 Common Core: 4.MD.A.3

Question 1: Rectangle area and perimeter (2 points)

a) $12 \times 5 = 60$ sq m.

b) $2 \times 12 + 2 \times 5 = 24 + 10 = 34$ m.



Area 60 sq m, perimeter 34 m.

60 sq m; 34 m

Scoring: 1 point for each part, with correct units.

Question 2: Square (2 points)

a) $8 \times 8 = 64$ sq ft.

b) $4 \times 8 = 32$ ft.

64 sq ft; 32 ft

Scoring: 1 point for each part.

Question 3: Missing sides (3 points)

a) $72 \div 9 = 8$ cm.

b) Half of 38 is 19, and $19 - 12 = 7$ in.

c) $90 \div 15 = 6$ ft.

8 cm; 7 in; 6 ft

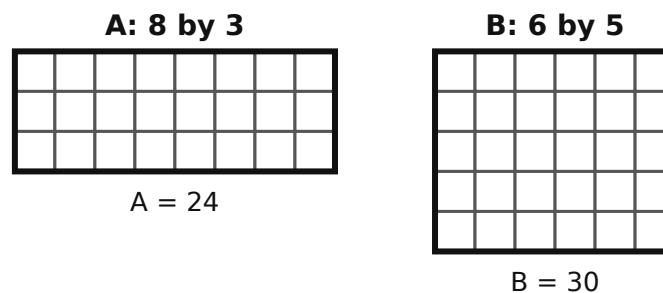
Scoring: 1 point for each correct width.

Question 4: Two rectangles on a grid (3 points)

a) A: $8 \times 3 = 24$. B: $6 \times 5 = 30$.

b) A: $2 \times 8 + 2 \times 3 = 22$. B: $2 \times 6 + 2 \times 5 = 22$.

c) $30 - 24 = 6$.



Areas shown.

24 and 30 sq units; 22 and 22 units; B is greater by 6 sq units.

Scoring: 1 point per part (both values needed in parts a and b).

Question 5: Ice rink laps (2 points)

a) $2 \times 60 + 2 \times 40 = 120 + 80 = 200$ ft.

b) $3 \times 200 = 600$ ft.

200 ft; 600 ft

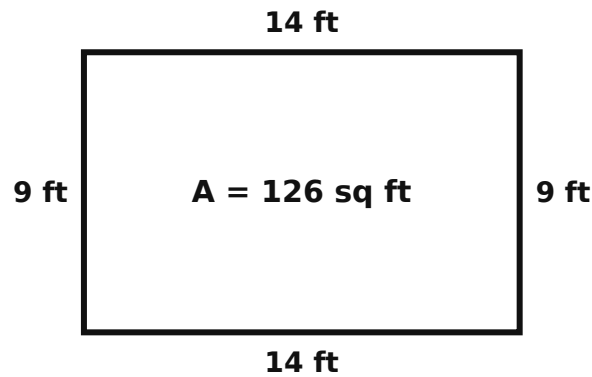
Scoring: 1 point for each part.

Question 6: Garden and fence (3 points)

a) $14 \times 9 = 126$ sq ft.

b) $2 \times 14 + 2 \times 9 = 28 + 18 = 46$ ft.

c) $46 \times \$4 = \$184$.



Area 126 sq ft; fence 46 ft.

126 sq ft; 46 ft; \$184

Scoring: 1 point for each part; follow-through credit if part b is correct and part c uses it.

Question 7: Living room (2 points)

a) $96 \div 8 = 12$ ft.

b) $2 \times 12 + 2 \times 8 = 24 + 16 = 40$ ft.

12 ft; 40 ft

Scoring: 1 point for each part; the perimeter point may use the student's length from part a.

Question 8: Length twice the width (3 points)

a) Half of 54 is 27. Width plus length is 3 equal parts, so $27 \div 3 = 9$ m.

b) $2 \times 9 = 18$ m.

c) $18 \times 9 = 162$ sq m.

9 m; 18 m; 162 sq m

Scoring: 1 point for each part. A correct check, $2 \times 18 + 2 \times 9 = 54$, is not required.

Total
20 points