NudgeLearn

Grade 4 · Math

Area & Perimeter

Answer key | 4.MD.A.3

16 problems

1. Find the **area** of the rectangle.

Answer 36 **square cm**

$A = l \times w = 9 \times 4 = 36$ square cm.

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2. Find the **perimeter** of the rectangle.

Answer 22 **m**

$P = 2(l + w) = 2(8 + 3) = 2(11) = 22$ m.

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3. Find the **area** of the square.

Answer 36 **square ft**

A square has equal sides, so $A = 6 \times 6 = 36$ square ft.

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4. Find the **perimeter** of the square above, with each side 6 ft.

Answer 24 **ft**

All four sides are equal: $P = 4 \times 6 = 24$ ft.

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5. A rectangle is 12 in long and 5 in wide. Find both its area and its perimeter.

Answer **Area** $= 60$ **square in; Perimeter** $= 34$ **in**

$A = 12 \times 5 = 60$ square in. $P = 2(12 + 5) = 2(17) = 34$ in.

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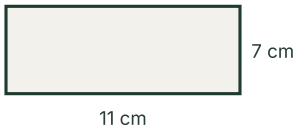
6. Find the **area** of the rectangle.



Answer 77 **square cm**

$A = 11 \times 7 = 77$ square cm.

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7. A rectangle has an **area** of 48 square cm and a width of 6 cm. What is its length?

Answer 8 **cm**

$A = l \times w$, so $48 = l \times 6$. Then $l = 48 \div 6 = 8$ cm.

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8. A rectangle has an **area** of 54 square m and a length of 9 m. What is its width?

Answer 6 **m**

$54 = 9 \times w$, so $w = 54 \div 9 = 6$ m.

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9. Which formula gives the **perimeter** of a rectangle with length l and width w?

Answer **C)** $2(l + w)$

Perimeter adds all four sides: two lengths and two widths, which is $2(l + w)$.

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10. A rectangle has a **perimeter** of 30 ft. One side is 9 ft. What is the length of the side next to it?

Answer 6 **ft**

Half the perimeter is one length plus one width: $30 \div 2 = 15$. Then $15 - 9 = 6$ ft.

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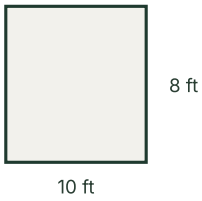
11. Find the **area** of the rectangular floor.



Answer 80 **square ft**

$A = 10 \times 8 = 80$ square ft.

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12. A garden bed is a square with sides of 7 m. Find its area and its perimeter.

Answer **Area** $= 49$ **square m; Perimeter** $= 28$ **m**

$A = 7 \times 7 = 49$ square m. $P = 4 \times 7 = 28$ m.

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13. Maya tiles a rectangular kitchen floor that is 9 ft by 7 ft. Each square tile covers 1 square ft. How many tiles does she need?

Answer 63 **tiles**

Area $= 9 \times 7 = 63$ square ft, so she needs 63 tiles.

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14. A rectangular dog pen needs a fence around all four sides. The pen is 14 ft long and 6 ft wide. How many feet of fencing are needed?

Answer 40 **ft**

$P = 2(14 + 6) = 2(20) = 40$ ft of fencing.

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15. A rectangular rug has an area of 72 square ft. If it is 8 ft long, how wide is it, and what is its perimeter?

Answer **Width $= 9$ ft; Perimeter $= 34$ ft**

$72 = 8 \times w$, so $w = 72 \div 8 = 9$ ft. Then $P = 2(8 + 9) = 2(17) = 34$ ft.

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16. A poster is 24 in wide and 36 in tall. Ribbon costs $\$2$ per foot, and you want ribbon around the whole border. There are 12 in in a foot. What is the cost of the ribbon?

Answer $\$20$

$P = 2(24 + 36) = 2(60) = 120$ in $= 120 \div 12 = 10$ ft. Cost $= 10 \times \$2 = \$20$.