

MEASUREMENT

Area, Perimeter, Time, Measurement Conversions

The perimeter of the rectangle shown is 62 cm. Show 2 ways to prove that the perimeter of this rectangle is 62 cm by creating formulas.



18 cm 13 cm
4.5C #1a

The perimeter of the rectangle shown is 144 cm. Show 2 ways to prove that the perimeter of this rectangle is 144 cm by creating formulas.

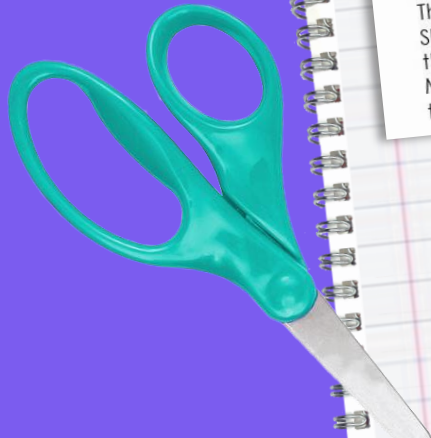


45 cm 27 cm
4.5C #1b

The perimeter of the square shown is 64 inches. Show 2 ways to prove that the perimeter of this square is 64 inches by creating formulas. Make sure one way shows the special formula that only works on squares.



16 in
4.5C #2a



4th
GRADE

Journal Prompts MARVEL Math

21 Ready-to-Use Journal Prompts to Deepen Understanding

4.5C #2b

Use models to determine the formulas for

PERIMETER OF A SQUARE

The perimeter of the square shown is 92 inches. Show 2 ways to prove that the perimeter of this square is 92 inches by creating formulas. Make sure 1 way shows the special formula that only works on squares.

23 in



4.5C #2b

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Easy-to-Use Math Station

Print the Sample Journal Response pages to give students ideas on how to respond.

4.5D #2

I can solve problems related to perimeter and area.

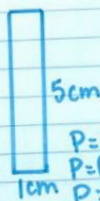
Create at least 2 rectangles with a perimeter of 12 cm. Find the area of each rectangle.



4.5D #2a

Make a plan:

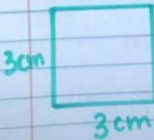
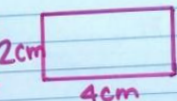
$$\begin{array}{r|l} l + l + w + w = P & \\ \hline 1 + 1 + 5 + 5 = 12 & \\ 2 + 2 + 4 + 4 = 12 & \\ 3 + 3 + 3 + 3 = 12 & \end{array}$$



$$\begin{aligned} P &= 2l + 2w \\ P &= (2 \times 1) + (2 \times 5) \\ P &= 2 + 10 \\ P &= 12 \text{ cm} \end{aligned}$$

$$\begin{aligned} A &= l \times w \\ A &= 5 \times 1 \\ A &= 5 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} A &= 2 \times 4 \\ A &= 8 \text{ cm}^2 \end{aligned}$$



This rectangle is a square

$$\begin{aligned} P &= 2l + 2w \\ P &= (2 \times 3) + (2 \times 3) \\ P &= 6 + 6 \\ P &= 12 \text{ cm} \end{aligned}$$



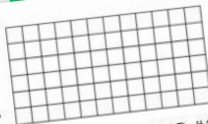
Create at least 2 rectangles with a perimeter of 12 cm. Find the area of each rectangle.



4.5D #2a

Use these Journal Prompts as **Early Finisher Work** or **Meaningful Homework**

The area of the rectangle shown is 72 square units. Create a formula to prove that the area of this rectangle is 72 square units. Use words and pictures to justify your formula.



4.5C #3b

Alex needs to convert 72 inches into feet. He multiplied 72×12 and got an answer of 864 feet. What was Alex's mistake? Explain to Alex how to correctly convert 72 inches into feet.



4.8B #1a

Fill in the blanks to create your own problem. Try to solve your problem 2 different ways.

_____ (proper noun) went to the store to buy _____ (noun). _____ (pronoun) arrived at the store at _____ (time) and shopped for _____ min. Then it took _____ (same proper noun as before) _____ min. to get home. What time did _____ (pronoun) arrive home?

The area of the square shown is 81 square units. Create a formula to prove that the area of this square is 81 square units. Use words and pictures to justify your formula.



4.5C #4b

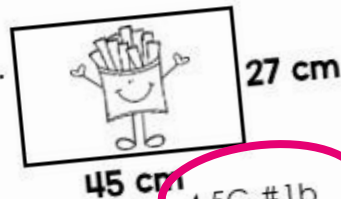
Built for the Measurement Standards

The perimeter of the rectangle shown is 62 cm.
Show 2 ways to prove that the perimeter of this rectangle is 62 cm by creating formulas.



4.5C #1a

The perimeter of the rectangle shown is 144 cm.
Show 2 ways to prove that the perimeter of this rectangle is 144 cm by creating formulas.



4.5C #1b

The perimeter of the square shown is 64 inches.
Show 2 ways to prove that the perimeter of this square is 64 inches by creating formulas.
Make sure one way shows the special formula that only works on squares.



4.5C #2a

The perimeter of the square shown is 92 inches.
Show 2 ways to prove that the perimeter of this square is 92 inches by creating formulas.
Make sure 1 way shows the special formula that only works on squares.



4.5C #2b

Every Journal Prompt includes 2 versions



Problem 1: Edgar has a board that is 4 yards long. He will cut five 2 foot pieces of wood off of his board. How much will he have left?

Problem 2: Aubrey has a roll of fabric that is 85 feet long. She will cut off five 12 foot pieces. How much will she have left on the roll?

Which problem do you think has more steps? Solve both problems. Was your prediction correct?



4.8C #2a

Problem 1: The mass of one insect is 567 mg. The mass of another insect is 670 mg. What is the difference between their masses?

Problem 2: The mass of one book is 1 kg. The mass of another book is 950 g. What is the difference between their masses?

Which problem do you think has more steps? Solve both problems. Was your prediction correct?



4.8C #2b

About the Author

This resource was created by Melissa Johnson, who has 16 years of k-10 teaching experience and a masters degree in Mathematics Education. Her resources build conceptual understanding, make connections between math topics and engage students in the mathematics they are learning.

