

Area and Perimeter

Algebraic Solutions

Area = length x width

Perimeter = length + width + length + width

A rectangle has a length that is 6 inches longer than its width. The perimeter of the rectangle is 64 inches. What are the rectangles dimensions?

Label the rectangle in terms of width.
Use w for width.



Write an equation to represent P , the perimeter.

Can you find the side lengths?

A rectangle has a length of x and a width that is 4 inches less than the length. The perimeter of the rectangle is 108 cm. What are the rectangle's dimensions?

Label the rectangle in terms of length.
Use l for width.



Write an equation to represent P , the perimeter.

Can you find the side lengths?

Area and Perimeter

Algebraic Solutions

Area = length x width

Perimeter = length + width + length + width

A rectangle has a length of 12 mm and a width that is equal to $4x$. The area is 144 mm^2 .

Label the length and width of the rectangle.



Write an equation to represent A, the area.

Write an expression to represent P, the perimeter.

Can you find x and the missing width by solving the equation?

Find the perimeter by evaluating your expression.

Some problems must be done algebraically to save time (and maybe headaches!)

A 15 x 25 rug sits in a room. It covers the whole floor except for an equally wide path along two Walls. If the perimeter of the room is 180 ft, how wide is the with of the path in the room.

