

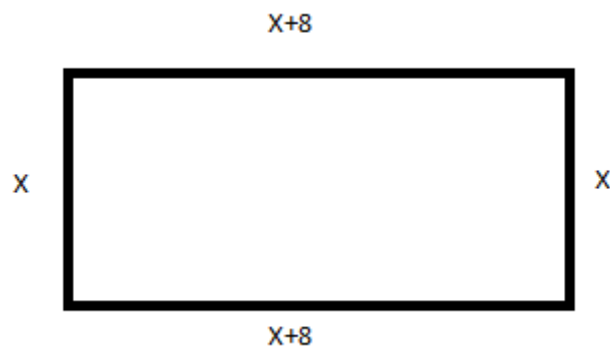
## Answer on Question #46867 – Math – Algebra

### Question

The length of the rectangle is 8 metres longer than the width. If the perimeter of the rectangle is 402 metres what are the dimensions of the rectangle?

### Solution

Our rectangle is shown below:



Let the smaller side of the rectangle be equal to  $X$  meters.

Then the side, which is 8 meters longer, will be  $X + 8$  meters.

Perimeter is equal to the sum of all the sides of the rectangle.

$$X + X + (X + 8) + (X + 8) = 402$$

$$2X + 2X + 16 = 402$$

$$4X = 402 - 16$$

$$4X = 386$$

$$X = \frac{386}{4}$$

$$X = 96.5$$

$$X + 8 = 96.5 + 8$$

$$X + 8 = 104.5$$

**Answer:**

Sides of the rectangle are equal to 96.5 and 104.5 meters.