**Lesson 1**

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| Topic Goal: Perimeter of Square, Rectangle and Triangle |

**Perimeter** means the distance around an object. This lesson discusses how to find the perimeter of various shapes.

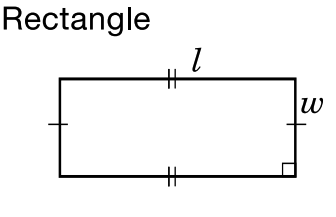
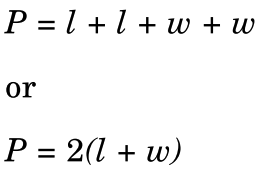
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| Example(s): |

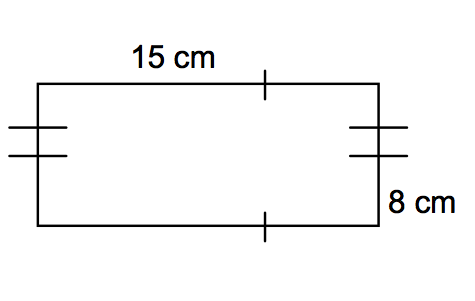
To find the **perimeter:**

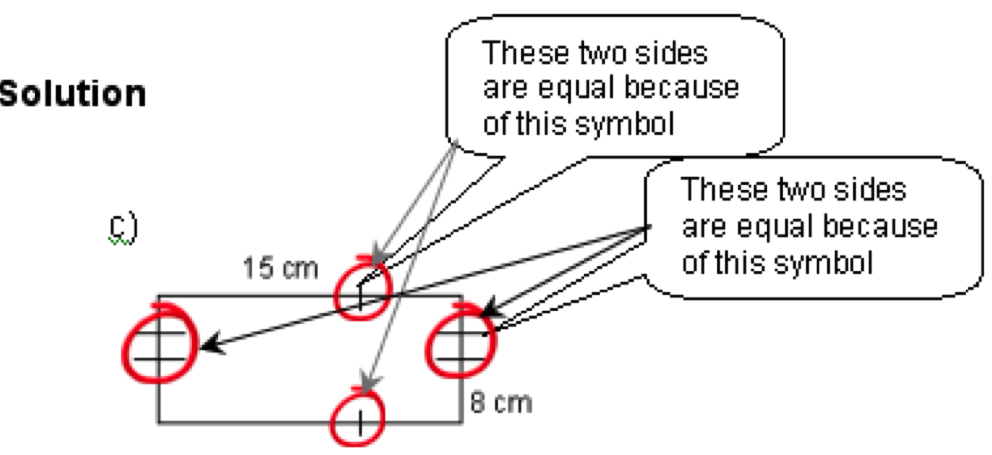
* Ensure all side lengths are given in the same units
* Add up all the sides.

**Formulas:**

P= Perimeter



Find the perimeter of the following rectangle:



P = 15 + 15 + 8 + 8

= 46 cm

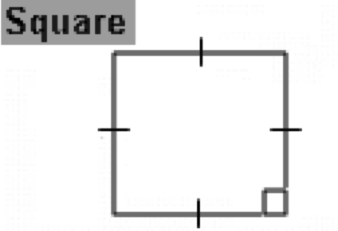
Because we know that a rectangle has two equal lengths and two equal widths, we can add one length and one width together and then multiply by two:

P = 2(l + w)

= 2(15 + 8)

= 2(**23**)

= 46 cm



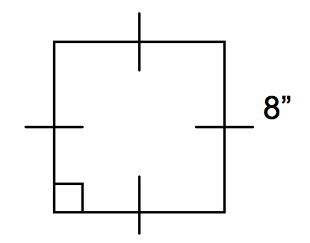
P = s + s + s + s

Or

P = 4s

s

Find the perimeter of the following:



Solution:

P = 8 + 8 + 8 + 8

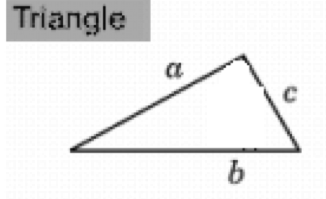
= 32”

Because we know that the sides of a square are all the same length, we can simply multiply one side length by 4.

P = 4s

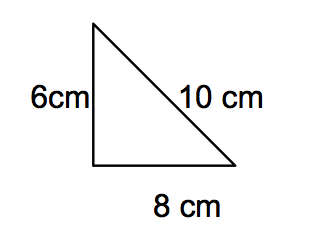
= 4(8)

= 32”



P = a + b + c

Find the perimeter of the following:

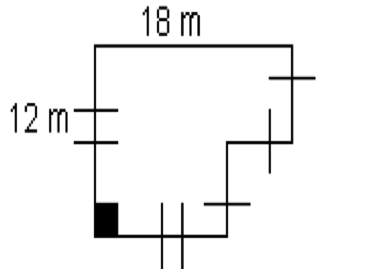


Solution:

P = 6 + 8 + 10

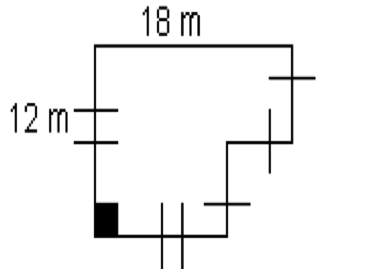
= 24 cm

Find the perimeter of the following:



Solution:

Step 1 – Fill in all the unknown sides



**6 m**

This side is 18 m – 12 m (the top side minus the bottom side) = **6 m**

**6 m**

**12 m**

Step 2 – Add up all the sides

P = 18 + 12 + 12 + 6 + 6 + 6

= 60 m

For some practice, play the perimeter game at this website:

http://www.bgfl.org/bgfl/custom/resources\_ftp/client\_ftp/ks2/maths/perimeter\_and\_area/index.html

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| Practice Questions: |

1. Calculate the perimeter for each of the following objects:

|  |  |
| --- | --- |
| Object | Perimeter |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

2. Complete the table below.

**P** = perimeter and **a**, **b**, and **c**, are lengths of sides of a triangle

|  |  |  |  |
| --- | --- | --- | --- |
| P | a | b | c |
|  | 9 | 6 | 9 |
| 32 | 8 | 10 |  |
| 43.8 | 7.8 | 22.5 |  |

To find the length of a side when you are given the Perimeter – **SUBTRACT** the other side lengths from the Perimeter

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| Assessment: |