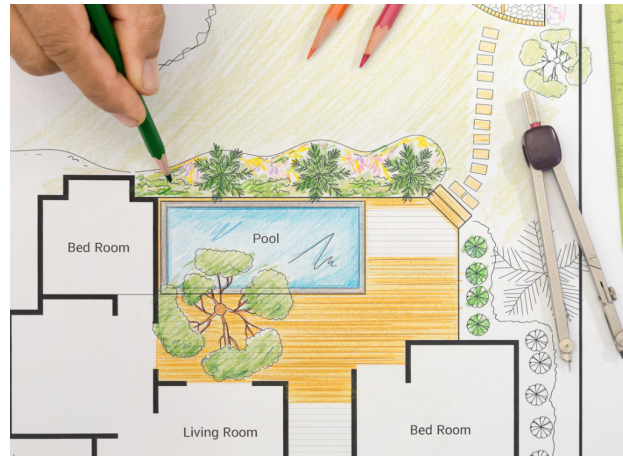


# Perimeter

Where does the diagram illustrate situations that could require me to calculate perimeter?



Perimeter is the distance or length around a shape... such as the rectangular pool.

I'll focus on the rectangular pool for my first perimeter example.

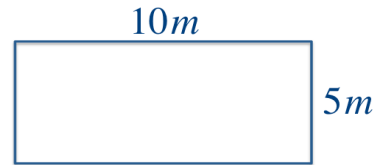
*Perimeter is a one-dimensional quantity of a two-dimensional shape.*

- How would I explain this statement?





The perimeter of the rectangle was calculated by adding the lengths of all four sides.

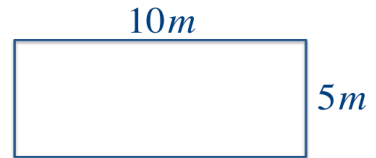


$$P = 10m + 5m + 10m + 5m$$

$$P = 30m$$

A classmate calculated the perimeter of the same rectangle using a different approach.

- How would I explain and demonstrate their approach for calculating the perimeter of the rectangle?
- How is this approach for calculating the perimeter of the rectangle the same as adding all four sides?



$$P = 2(l) + 2(w)$$

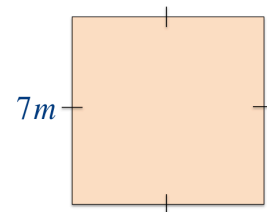
$$P = 2(10) + 2(5)$$

$$P = 20 + 10$$

$$P = 30m$$

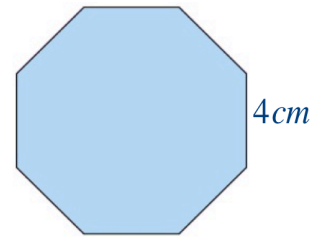
Let's apply both solution approaches used for determining the perimeter of the rectangle to a new shape.

- How would I walk and talk someone through a perimeter solution that involved only addition?
- How could I use multiplication to adjust my previous perimeter solution?

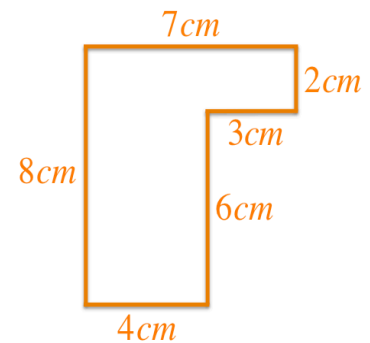




- How would I demonstrate using the previous solution approaches to calculate the perimeter of the octagon?

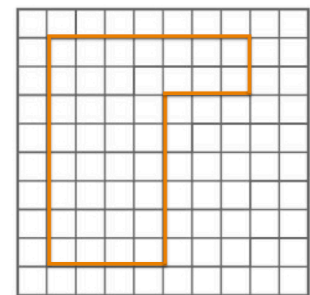


- Why will it not be possible to calculate the perimeter of this new shape using a multiplication approach?
- What potential error could I anticipate when calculating the perimeter of this new shape?
- How would I demonstrate calculating the perimeter?



A grid can also be used to determine the perimeter of a shape.

- How would I explain and demonstrate determining the perimeter using the grid?



## Perimeter - Skills Checklist

I can describe a situation where I would need to calculate perimeter

I can explain the type of measurement I'm calculating when I determine the perimeter of a shape

I can explain and demonstrate how I could calculate the perimeter of a shape using addition only

I can explain and demonstrate how multiplication can sometimes help me calculate the perimeter of a shape

# Perimeter - Worksheet



$2ab + 6k$   
 $2ab + 6k$

The Get It Guide™