

Calculating the perimeter of regular shapes

Sheet 1

Calculate the perimeters of these regular shapes from the length of one side. Complete the table.

Regular Shape	Length of one side	Number of sides	Perimeter
Equilateral triangle	15cm		
Octagon	5cm		
Pentagon	12cm		
Decagon	7cm		
Square	16cm		
Heptagon	3cm		
Hexagon	$1\frac{1}{2}$ cm		
Nonagon	4cm		

Challenge

What would the lengths of the sides of the following regular shapes be if the perimeter is 30cm:

- a. equilateral triangle
- b. square
- c. pentagon
- d. hexagon

Can you suggest 5 different possible side lengths for an irregular pentagon with a perimeter of 40cm?