Grade 6

1. The perimeter of a rectangle is the *same* as the perimeter of a square. If the length of a square is 25cm and the width of the rectangle is 10cm. Find the length of the rectangle.

Workings			25 cm		
Perimeter of square	= leng = 25	gth of one side \times 4 $5 \times 4 = 100$ cm		?	
Perimeter of rectangle = $(length + width) \times 2$					
or $(length + width) \times 2$	=	Perimeter of rectangle			
$(length + 10 cm) \times$	2 =	100 cm		10 cm	
length $+$ 10 cm	=	$100 \text{ cm} \div 2 = 50 \text{ cm}$			
length	=	50 cm - 10 cm = 40 cm	ANSWER	= 40 cm	

A square of side 11 cm has the *same* perimeter as a rectangle. The length of the rectangle is 14cm. What is the width of the rectangle?
Workings 11cm

	Perimeter of square = le	ngth of one side × 4	
	= Perimeter of rectangle = (l	$11 \times 4 = 44 \text{ cm}$ ength + width) × 2	14 cm
or	$(length + width) \times 2 = 1$	Perimeter of rectangle	?
	$(14 + \text{width}) \times 2 =$	= 44 cm	
	14 + width =	$=\frac{44}{2}$ cm	
	Width =	= 22 cm - 14 cm = 8 cm	ANSWER = 8 cm .
3	The perimeter of a rectangle i	s 216 cm. Its length is 5 time	s its width What is the

3. The perimeter of a rectangle is 216 cm. Its length is *5 times* its width. What is the length of the rectangle?

(length + width) × 2 = Perimeter of rectangle \checkmark ($5 \times \text{widths} + \text{width}$) × 2 = 216 cm $6 \text{ widths} = 216 \div 2 = 108 \text{ cm}$ Width = $108 \div 6 = 18 \text{ cm}$ Answer = 18 cm

Maths