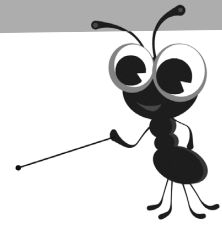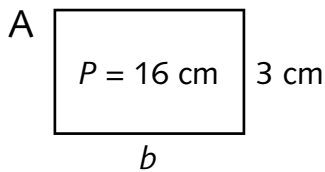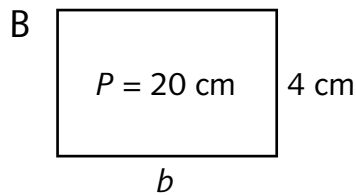Name: _____ Date: _____

Missing a length

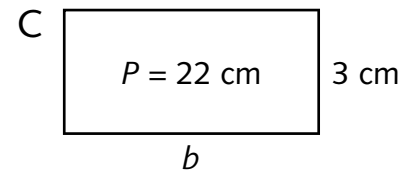Use the relations of perimeter or area to find missing lengths

Challenges 1, 2, 3

Use the rule $P = 2(a + b)$ to find the length of side b in these rectangles. Use the other side of this sheet for your working.
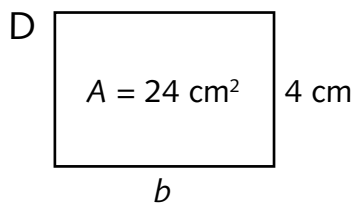
A

| $P = 16$ cm | 3 cm |

b

$b = \boxed{}$ cm

B

| $P = 20$ cm | 4 cm |

b

$b = \boxed{}$ cm

C

| $P = 22$ cm | 3 cm |

b

$b = \boxed{}$ cm

Challenges 2, 3

Use the rule $A = a \times b$ to find the length of side b in these rectangles.

D

| $A = 24$ cm² | 4 cm |

b

$b = \boxed{}$ cm

E

| $A = 30$ cm² | 5 cm |

b

$b = \boxed{}$ cm

F

| $A = 63$ cm² | 7 cm |

b
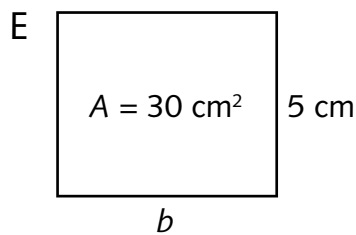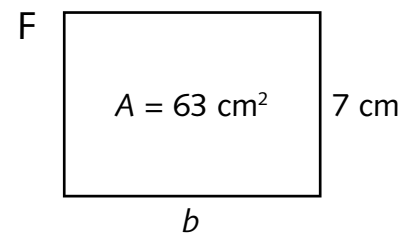
$b = \boxed{}$ cm

Challenge 3

This table shows the area and perimeter of rectangles.

Work out the missing lengths.

Rectangle	Area	Perimeter	Length a	Length b
A	42 cm²	26 cm	7 cm	cm
B	60 cm²	34 cm	cm	cm
C	90 cm²	46 cm	cm	cm

Sketch a rectangle on the other side of this sheet. Write the length of one side and the perimeter or area of the rectangle. Ask someone at home to work out the missing length. Then swap round so they draw the rectangle for you to work out the missing length.