

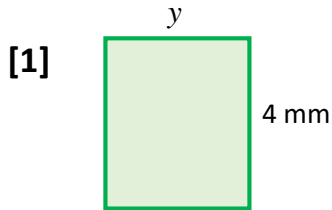
Perimeter (rectangles): Use perimeter to find missing side length

<http://www.learnersgrid.com>

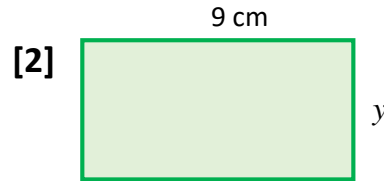
Date:

Name:

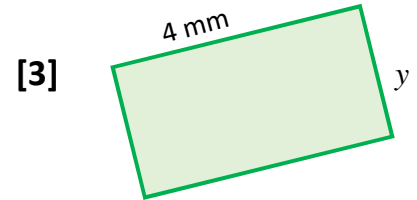
Use formulae, " $P = 2(L + w)$ " or " $P = 2L + 2W$ ", and the given perimeter of each rectangle to calculate the missing side length - and show ALL YOUR WORKING! Round to 1 d.p. **You should use your calculator!**



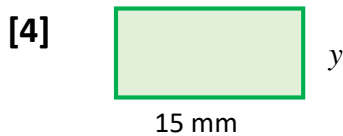
length of $y = ?$
perimeter = 10 mm



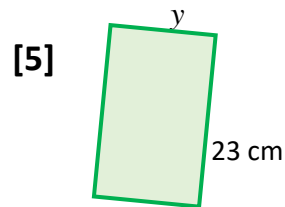
length of $y = ?$
perimeter = 28 cm



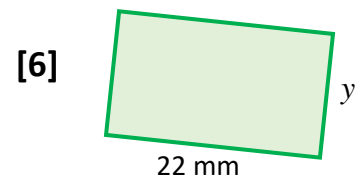
length of $y = ?$
perimeter = 12 mm



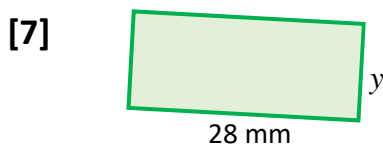
length of $y = ?$
perimeter = 66 mm



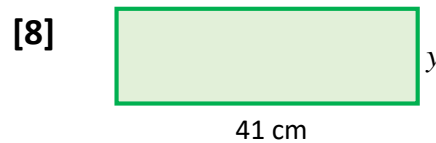
length of $y = ?$
perimeter = 86 cm



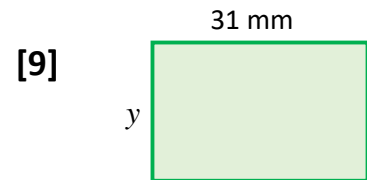
length of $y = ?$
perimeter = 78 mm



length of $y = ?$
perimeter = 96 mm



length of $y = ?$
perimeter = 144 cm



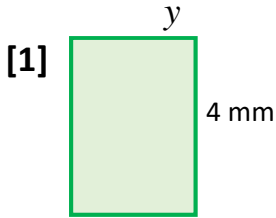
length of $y = ?$
perimeter = 118 mm

ANSWERS

Perimeter (rectangles): Use perimeter to find missing side length

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Use formulae, " $P = 2(L + w)$ " or " $P = 2L + 2W$ ", and the given perimeter of each rectangle to calculate the missing side length - and show ALL YOUR WORKING! Round to 1 d.p. You should use your calculator!



side y length = 1 mm

Worked Solution:

$$P = 2(L + W)$$

$$10 = 2(4 + y)$$

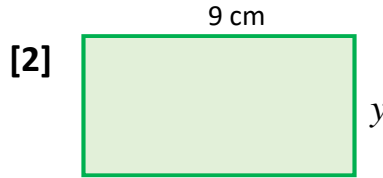
$$10 = 8 + 2y \quad -8$$

$$2 = 2y$$

$$2/2 = 2y/2 \quad 1.0$$

$$1 = y$$

$$y = 1 \text{ mm}$$



side y length = 5 cm

Worked Solution:

$$P = 2(L + W)$$

$$28 = 2(9 + y)$$

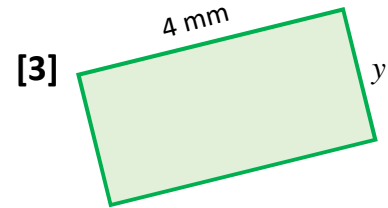
$$28 = 18 + 2y \quad -18$$

$$10 = 2y$$

$$10/2 = 2y/2 \quad 5.0$$

$$5 = y$$

$$y = 5 \text{ cm}$$



side y length = 2 mm

Worked Solution:

$$P = 2(L + W)$$

$$12 = 2(4 + y)$$

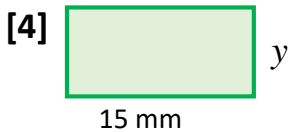
$$12 = 8 + 2y \quad -8$$

$$4 = 2y$$

$$4/2 = 2y/2 \quad 2.0$$

$$2 = y$$

$$y = 2 \text{ mm}$$



side length = 18 mm

Worked Solution:

$$P = 2(L + W)$$

$$66 = 2(15 + y)$$

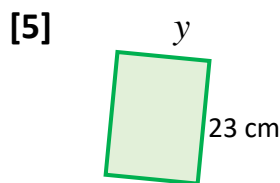
$$66 = 30 + 2y \quad -36$$

$$36 = 2y$$

$$36/2 = 2y/2 \quad 18.0$$

$$18 = y$$

$$y = 18 \text{ mm}$$



side length = 20 cm

Worked Solution:

$$P = 2(L + W)$$

$$86 = 2(23 + y)$$

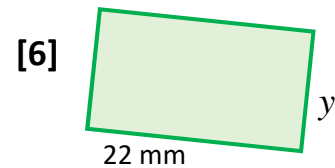
$$86 = 46 + 2y \quad -46$$

$$40 = 2y$$

$$40/2 = 2y/2 \quad 20.0$$

$$20 = y$$

$$y = 20 \text{ cm}$$



side length = 17 mm

Worked Solution:

$$P = 2(L + W)$$

$$78 = 2(22 + y)$$

$$78 = 44 + 2y \quad -44$$

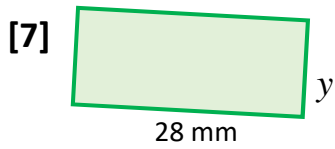
$$34 = 2y$$

$$34/2 = 2y/2 \quad 17.0$$

$$17 = y$$

$$y = 17 \text{ mm}$$

ANSWERS (page 2)



side length = 20 mm

Worked Solution:

$$P = 2(L + W)$$

$$96 = 2(28 + y)$$

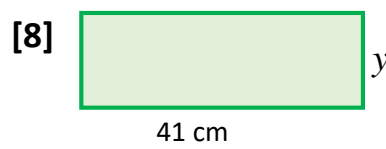
$$- 56 \quad 96 = 56 + 2y \quad - 56$$

$$40 = 2y$$

$$40/2 = 2y/2 \quad 20.0$$

$$20 = y$$

$$y = 20 \text{ mm}$$



side length = 31 cm

Worked Solution:

$$P = 2(L + W)$$

$$144 = 2(41 + y)$$

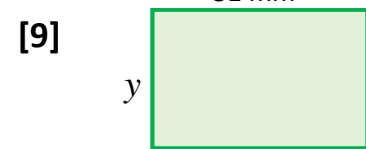
$$- 82 \quad 144 = 82 + 2y \quad - 82$$

$$62 = 2y$$

$$62/2 = 2y/2 \quad 31.0$$

$$31 = y$$

$$y = 31 \text{ cm}$$



side length = 28 mm

Worked Solution:

$$P = 2(L + W)$$

$$118 = 2(31 + y)$$

$$- 62 \quad 118 = 62 + 2y \quad - 62$$

$$56 = 2y$$

$$56/2 = 2y/2 \quad 28.0$$

$$28 = y$$

$$y = 28 \text{ mm}$$