

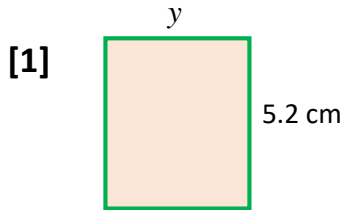
Perimeter (rectangles): Use perimeter to find missing side length

<http://www.learnersgrid.com>

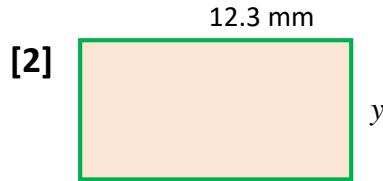
Date:

Name:

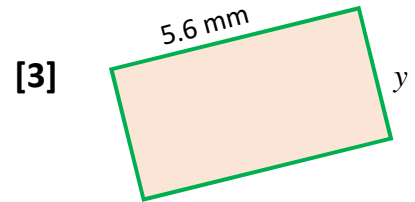
Use formulae, " $P = 2(L + w)$ " or " $P = 2L + 2W$ ", and the given perimeter of each rectangle to calculate the missing side length - and show ALL YOUR WORKING! Round to 1 d.p. **You should use your calculator!**



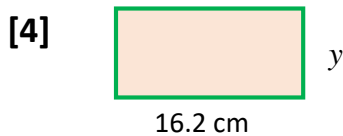
length of $y = ?$
perimeter = 14.8 cm



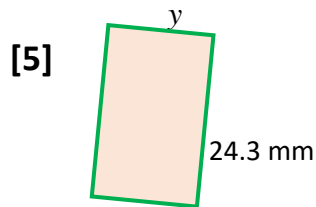
length of $y = ?$
perimeter = 37.2 mm



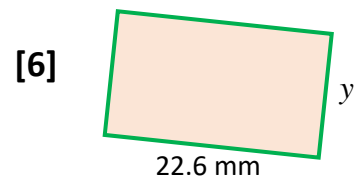
length of $y = ?$
perimeter = 18.4 mm



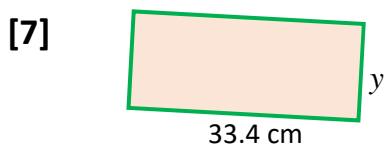
length of $y = ?$
perimeter = 76.8 cm



length of $y = ?$
perimeter = 89.2 mm



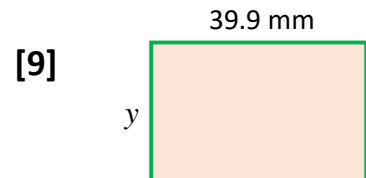
length of $y = ?$
perimeter = 80.4 mm



length of $y = ?$
perimeter = 111.6 cm



length of $y = ?$
perimeter = 172.4 mm



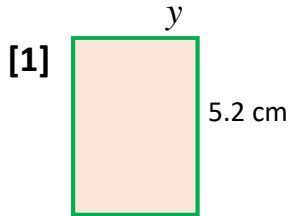
length of $y = ?$
perimeter = 149.6 mm

ANSWERS

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

<http://www.learnersgrid.com>

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 = 2.2 cm

Worked Solution:

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

$$14.8 = 2(5.2 + y)$$

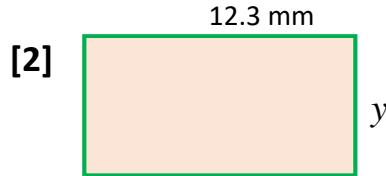
$$- 10.4 \quad 14.8 = 10.4 + 2y \quad - 10.4$$

$$4.4 = 2y$$

$$4.4/2 = 2y/2 \quad 2.2$$

$$2.2 = y$$

$y = 2.2 \text{ cm}$



side y length = 6.3 mm

Worked Solution:

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

$$37.2 = 2(12.3 + y)$$

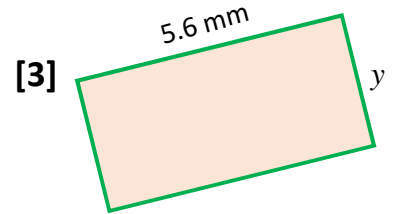
$$- 24.6 \quad 37.2 = 24.6 + 2y \quad - 24.6$$

$$12.6 = 2y$$

$$12.6/2 = 2y/2 \quad 6.3$$

$$6.3 = y$$

$y = 6.3 \text{ mm}$



side y length = 3.6 mm

Worked Solution:

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

$$18.4 = 2(5.6 + y)$$

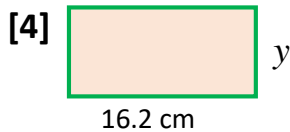
$$- 11.2 \quad 18.4 = 11.2 + 2y \quad - 11.2$$

$$7.2 = 2y$$

$$7.2/2 = 2y/2 \quad 3.6$$

$$3.6 = y$$

$y = 3.6 \text{ mm}$



side length = 22.2 cm

Worked Solution:

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

$$76.8 = 2(16.2 + y)$$

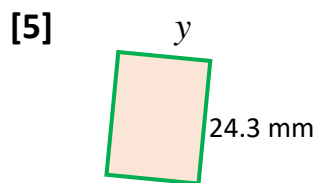
$$- 44.4 \quad 76.8 = 32.4 + 2y \quad - 44.4$$

$$44.4 = 2y$$

$$44.4/2 = 2y/2 \quad 22.2$$

$$22.2 = y$$

$y = 22.2 \text{ cm}$



side length = 20.3 mm

Worked Solution:

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

$$89.2 = 2(24.3 + y)$$

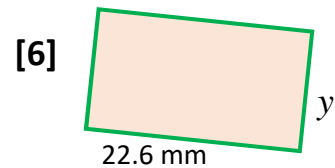
$$- 48.6 \quad 89.2 = 48.6 + 2y \quad - 48.6$$

$$40.6 = 2y$$

$$40.6/2 = 2y/2 \quad 20.3$$

$$20.3 = y$$

$y = 20.3 \text{ mm}$



side length = 17.6 mm

Worked Solution:

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

$$80.4 = 2(22.6 + y)$$

$$- 45.2 \quad 80.4 = 45.2 + 2y \quad - 45.2$$

$$35.2 = 2y$$

$$35.2/2 = 2y/2 \quad 17.6$$

$$17.6 = y$$

$y = 17.6 \text{ mm}$

ANSWERS (page 2)



side length = 22.4 cm

Worked Solution:

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

$$111.6 = 2(33.4 + y)$$

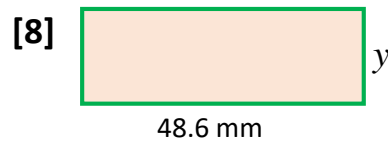
$$- 66.8 \quad 111.6 = 66.8 + 2y \quad - 66.8$$

$$44.8 = 2y$$

$$44.8/2 = 2y/2 \quad 22.4$$

$$22.4 = y$$

$$y = 22.4 \text{ cm}$$



side length = 37.6 mm

Worked Solution:

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

$$172.4 = 2(48.6 + y)$$

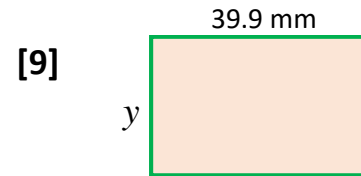
$$- 97.2 \quad 172.4 = 97.2 + 2y \quad - 97.2$$

$$75.2 = 2y$$

$$75.2/2 = 2y/2 \quad 37.6$$

$$37.6 = y$$

$$y = 37.6 \text{ mm}$$



side length = 34.9 mm

Worked Solution:

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

$$149.6 = 2(39.9 + y)$$

$$- 79.8 \quad 149.6 = 79.8 + 2y \quad - 79.8$$

$$69.8 = 2y$$

$$69.8/2 = 2y/2 \quad 34.9$$

$$34.9 = y$$

$$y = 34.9 \text{ mm}$$