

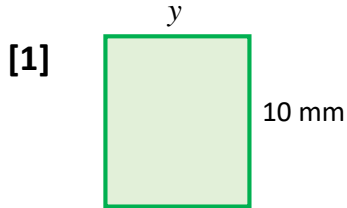
Perimeter (rectangles): Use perimeter to find missing side length

<http://www.learnersgrid.com>

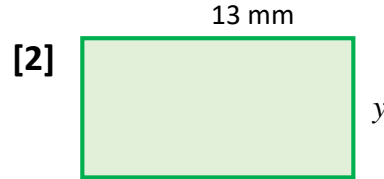
Date:

Name:

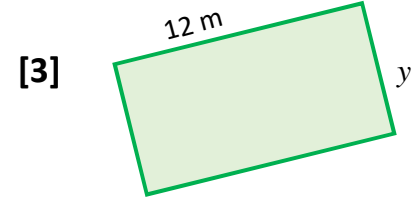
Use formulae, " $P = 2(L + w)$ " or " $P = 2L + 2W$ ", and the given perimeter of each rectangle to calculate the missing side length - and show ALL YOUR WORKING! Round to 1 d.p. **You should use your calculator!**



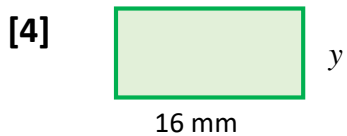
length of $y = ?$
perimeter = 32 mm



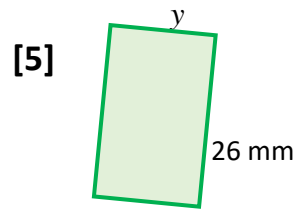
length of $y = ?$
perimeter = 46 mm



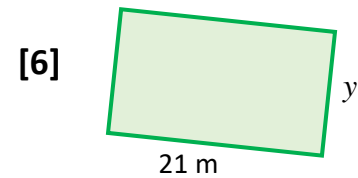
length of $y = ?$
perimeter = 38 m



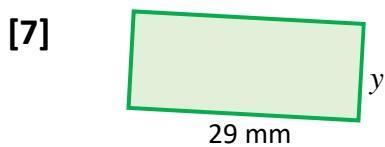
length of $y = ?$
perimeter = 72 mm



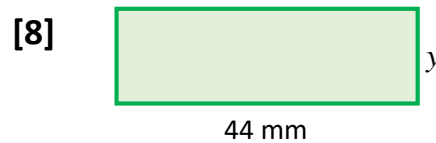
length of $y = ?$
perimeter = 94 mm



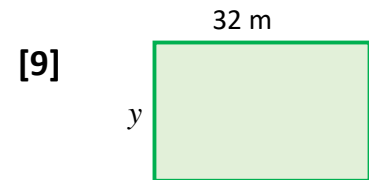
length of $y = ?$
perimeter = 78 m



length of $y = ?$
perimeter = 96 mm



length of $y = ?$
perimeter = 152 mm



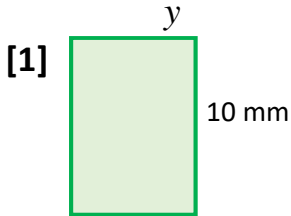
length of $y = ?$
perimeter = 122 m

ANSWERS

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

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side y length = 6 mm

Worked Solution:

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

$$32 = 2(10 + y)$$

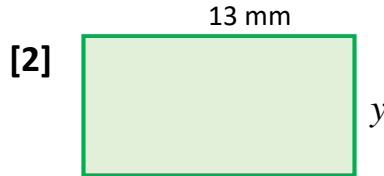
$$- 20 \quad 32 = 20 + 2y \quad - 20$$

$$12 = 2y$$

$$12/2 = 2y/2 \quad 6.0$$

$$6 = y$$

$$y = 6 \text{ mm}$$



side y length = 10 mm

Worked Solution:

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

$$46 = 2(13 + y)$$

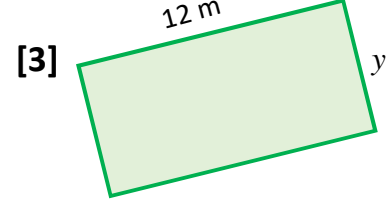
$$- 26 \quad 46 = 26 + 2y \quad - 26$$

$$20 = 2y$$

$$20/2 = 2y/2 \quad 10.0$$

$$10 = y$$

$$y = 10 \text{ mm}$$



side y length = 7 m

Worked Solution:

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

$$38 = 2(12 + y)$$

$$- 24 \quad 38 = 24 + 2y \quad - 24$$

$$14 = 2y$$

$$14/2 = 2y/2 \quad 7.0$$

$$7 = y$$

$$y = 7 \text{ m}$$



side length = 20 mm

Worked Solution:

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

$$72 = 2(16 + y)$$

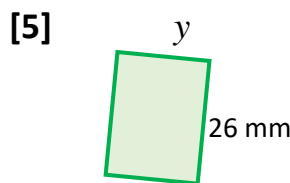
$$- 40 \quad 72 = 32 + 2y \quad - 40$$

$$40 = 2y$$

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

$$20 = y$$

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



side length = 21 mm

Worked Solution:

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

$$94 = 2(26 + y)$$

$$- 52 \quad 94 = 52 + 2y \quad - 52$$

$$42 = 2y$$

$$42/2 = 2y/2 \quad 21.0$$

$$21 = y$$

$$y = 21 \text{ mm}$$



side length = 18 m

Worked Solution:

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

$$78 = 2(21 + y)$$

$$- 42 \quad 78 = 42 + 2y \quad - 42$$

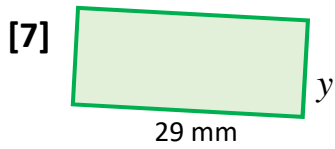
$$36 = 2y$$

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

$$18 = y$$

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

ANSWERS (page 2)



side length = 19 mm

Worked Solution:

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

$$96 = 2(29 + y)$$

$$- 58 \quad 96 = 58 + 2y \quad - 58$$

$$38 = 2y$$

$$38/2 = 2y/2 \quad 19.0$$

$$19 = y$$

$$y = 19 \text{ mm}$$



side length = 32 mm

Worked Solution:

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

$$152 = 2(44 + y)$$

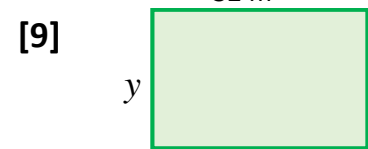
$$- 88 \quad 152 = 88 + 2y \quad - 88$$

$$64 = 2y$$

$$64/2 = 2y/2 \quad 32.0$$

$$32 = y$$

$$y = 32 \text{ mm}$$



side length = 29 m

Worked Solution:

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

$$122 = 2(32 + y)$$

$$- 64 \quad 122 = 64 + 2y \quad - 64$$

$$58 = 2y$$

$$58/2 = 2y/2 \quad 29.0$$

$$29 = y$$

$$y = 29 \text{ m}$$