

Perimeter of rectangles



Remember: perimeter is the distance all the way round the outside of a shape. It is usually measured in mm, cm, m, or km.



1. Measure side 1 2. Measure side 3

What do you notice?

When measuring the opposite sides of any rectangle you will notice that the lengths are exactly the same. So, if you measure one there is no need to measure the opposite side - it will be the same.

Check this for sides 2 and 4.

So, to find the perimeter of a rectangle you only need to measure two sides. But you will need to double your answer to get the distance round a shape.

Write down how to find the perimeter of a rectangle without measuring all four sides:

.....
.....

Perimeter of rectangles



The length (or base) of this rectangle is 9 cm
Length can be shortened to l , so that $l = 9$ cm

The width (or height) of this rectangle is 2 cm.
Width can be shortened to w , so that $w = 2$ cm

The perimeter of the rectangle is the length twice ($2l$) plus
the width twice ($2w$) or

$$\text{Perimeter (P)} = 2l + 2w$$

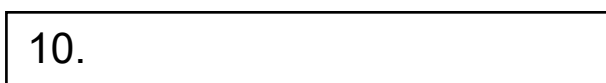
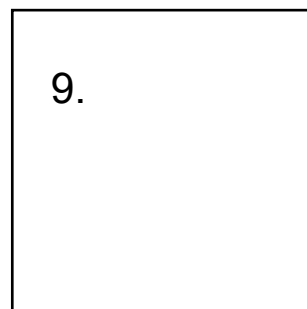
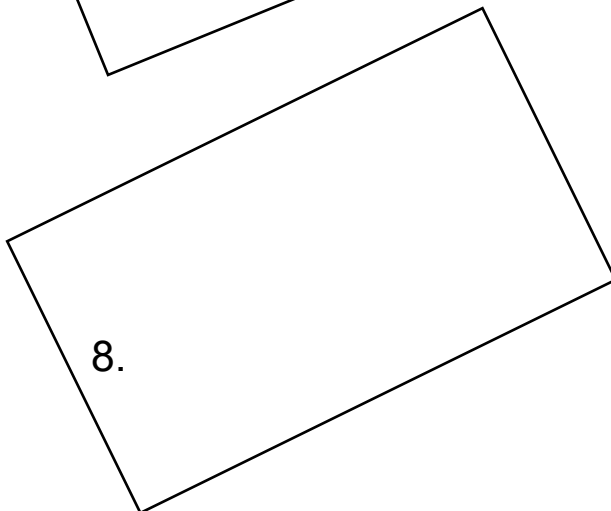
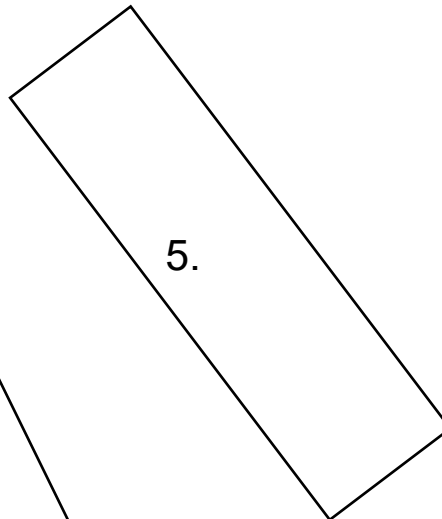
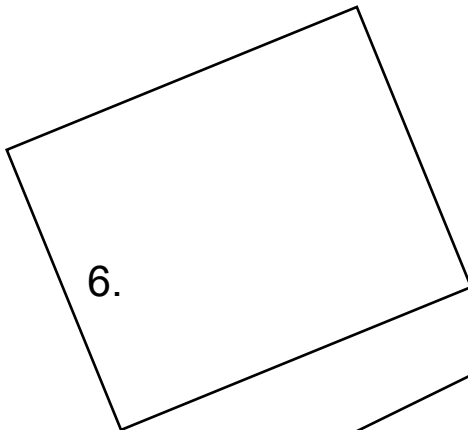
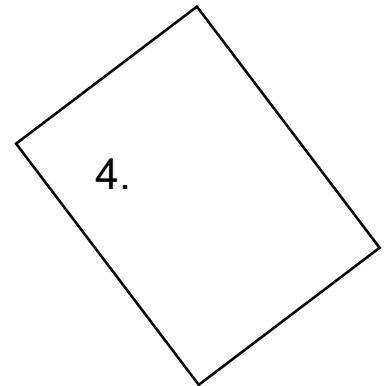
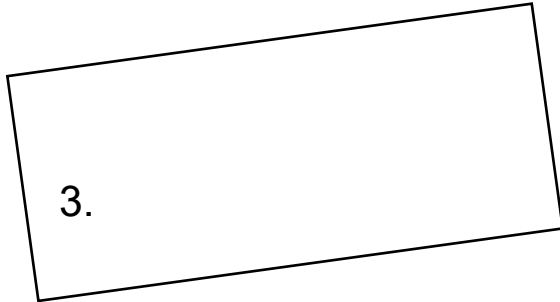
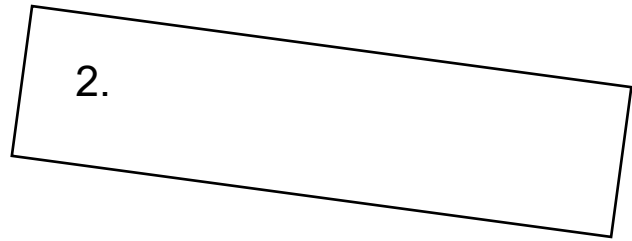
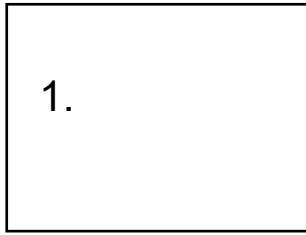
You may have found another way of working out the perimeter, such as adding the length and width and then doubling the answer. This can be written: $P = 2(l + w)$

Try to use the formula $P = 2l + 2w$ or

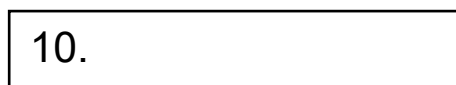
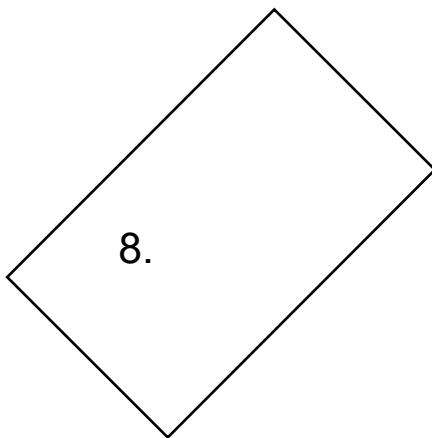
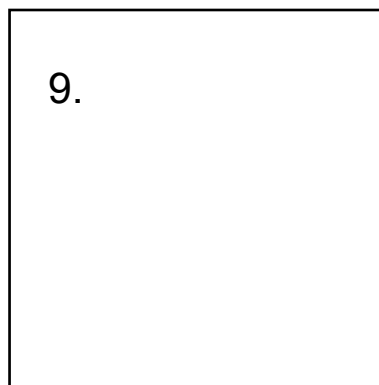
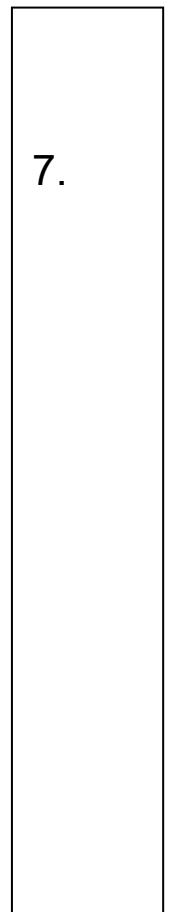
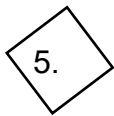
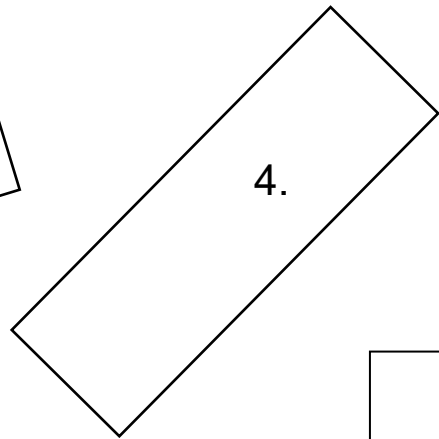
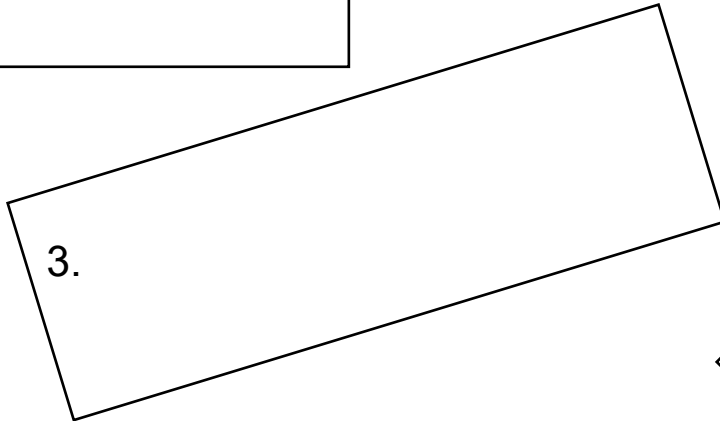
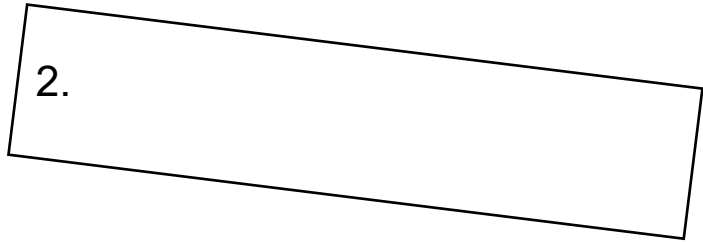
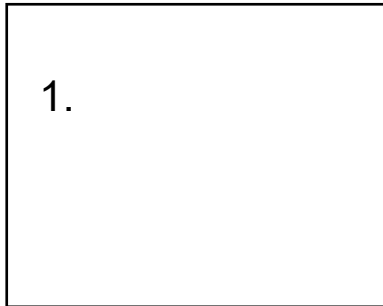
$P = 2(l + w)$ to work out the perimeter of these rectangles:

1. A rectangle with a length of 6 cm and a width of 4 cm.
2. A rectangle 8 cm long and 4 cm wide.
3. A rectangle with a base of 7 cm and a height of 6 cm.
4. A rectangle with a 9 cm length and a 4 cm width.
5. A rectangle with a base of 10 cm and a height of 5 cm.

Find the perimeter of these rectangles, just by measuring two sides and then working out the total distance round each shape:



Find the perimeter of these rectangles, just by measuring two sides and then working out the total distance round each shape:





Answers

Measurements may vary depending on the printer settings used

Page 1

1. 10 cm 2. 10 cm - the same measurement sides 2 and 4 both 2 cm.

Note printers may make the sides of these rectangles slightly larger or smaller.)

Page 2

1. 20 cm 2. 24 cm 3. 26 cm 4. 26 cm 5. 30 cm

Page 3

1. 14 cm 2. 20 cm 3. 20 cm 4. 14 cm 5. 18 cm
6. 18 cm 7. 24 cm 8. 22 cm 9. 16 cm 10. 18 cm

Page 4

1. 18 cm 2. 22 cm 3. 24 cm 4. 16 cm 5. 4 cm
6. 28 cm 7. 28 cm 8. 16 cm 9. 20 cm 10. 14 cm