

## Level 3 Maths Revision – Area and perimeter

### A: Converting millimetres to centimetres and centimetres to millimetres

Reminder

**Remember: 10mm = 1cm**

Examples

Look at these examples: -

- |                        |                        |                        |                          |
|------------------------|------------------------|------------------------|--------------------------|
| <b>a)</b> 3mm = 0.3cm  | <b>b)</b> 17mm = 1.7cm | <b>c)</b> 30mm = 3cm   | <b>d)</b> 187mm = 18.7cm |
| <b>e)</b> 0.2cm = 2 mm | <b>f)</b> 3.2cm = 32mm | <b>g)</b> 40cm = 400mm | <b>h)</b> 34.2cm = 344cm |

Copy and complete: -

- |                           |                          |                           |                             |
|---------------------------|--------------------------|---------------------------|-----------------------------|
| <b>1)</b> 56mm = ____ cm  | <b>2)</b> 56cm = ____ mm | <b>3)</b> 1.4cm = ____ mm | <b>4)</b> 9mm = ____ cm     |
| <b>5)</b> 0.7cm = ____ mm | <b>6)</b> 9cm = ____ mm  | <b>7)</b> 700mm = ____ cm | <b>8)</b> 13.9 cm = ____ mm |
| <b>9)</b> 6cm = ____ mm   | <b>10)</b> 6mm = ____ cm | <b>11)</b> 11cm = ____ mm | <b>12)</b> 12mm = ____ cm   |

### B: Converting centimetres to metres and metres to centimetres

Reminder

**Remember: 100cm = 1m**

Examples

Look at these examples: -

- |                         |                        |                       |                         |
|-------------------------|------------------------|-----------------------|-------------------------|
| <b>a)</b> 3cm = 0.03m   | <b>b)</b> 33cm = 0.33m | <b>c)</b> 30cm = 0.3m | <b>d)</b> 333cm = 3.33m |
| <b>e)</b> 17m = 1 700cm | <b>f)</b> 7m = 700cm   | <b>g)</b> 0.7m = 70cm | <b>h)</b> 0.07m = 7cm   |

Copy and complete: -

- |                           |                           |                           |                            |
|---------------------------|---------------------------|---------------------------|----------------------------|
| <b>13)</b> 4m = ____ cm   | <b>14)</b> 44m = ____ cm  | <b>15)</b> 0.4m = ____ cm | <b>16)</b> 0.04m = ____ cm |
| <b>17)</b> 4.4m = ____ cm | <b>18)</b> 1.3m = ____ cm | <b>19)</b> 700cm = ____ m | <b>20)</b> 145cm = ____ m  |
| <b>21)</b> 140cm = ____ m | <b>22)</b> 60cm = ____ cm | <b>23)</b> 66cm = ____ m  | <b>24)</b> 6cm = ____ m    |

## C: Converting metres to kilometres and kilometres to metres

Reminder

**Remember: 1 000m = 1km**

Examples

Look at these examples: -

a) 3 000m = 3km

b) 300m = 0.3km

c) 30m = 0.03km

d) 3m = 0.003km

e) 1.7km = 1 700m

f) 0.8km = 800m

g) 0.09km = 90m

h) 0.007km = 7m

Copy and complete: -

25) 4km = \_\_\_\_m

26) 44km = \_\_\_\_m

27) 4.4km = \_\_\_\_m

28) 0.04km = \_\_\_\_m

29) 8000m = \_\_\_\_km

30) 7983m = \_\_\_\_km

31) 726m = \_\_\_\_km

32) 200m = \_\_\_\_km

33) 13m = \_\_\_\_km

34) 60m = \_\_\_\_km

35) 6m = \_\_\_\_km

36) 0.6km = \_\_\_\_m

## D: Area and perimeter (mixed units)


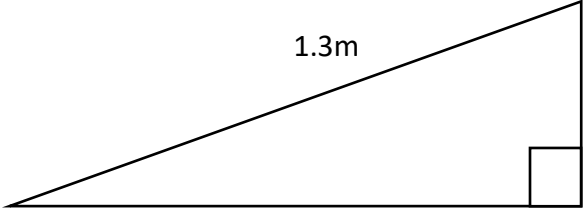
Reminder:-

If we need to find the area in  $\text{cm}^2$ , convert all measurements to cm before calculating the area

If we need to find the perimeter in cm, convert all measurements to cm before calculating the perimeter.

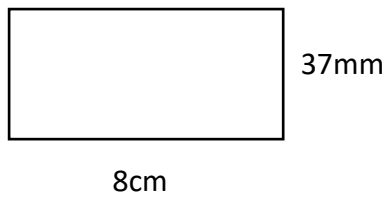
etc.

Examples

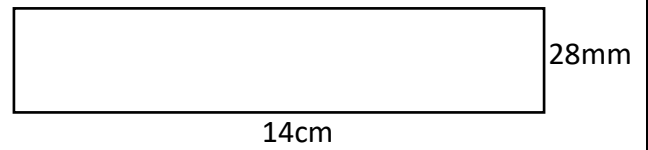
<p>a) Calculate the perimeter of this rectangle in cm.</p>  <p>30cm</p> <p>1.2m</p> <p>1.2m = 120cm</p> <p>Perimeter = 120 + 30 + 120 + 30 = 300cm</p>	<p>Calculate the area of this triangle in <math>\text{cm}^2</math>.</p>  <p>1.3m</p> <p>50cm</p> <p>1.2 m</p> <p>Base = 1.2m = 120cm    Height = 50cm</p> <p>Area = <math>\frac{1}{2}</math> base <math>\times</math> height = <math>\frac{1}{2} \times 120 \times 50 = 3\,000\text{cm}^2</math></p>
---	--

Now try these examples: -

**37)** Calculate the area of this rectangle in  $\text{mm}^2$ .



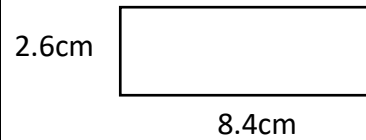
**38)** Calculate the perimeter of this rectangle in cm.



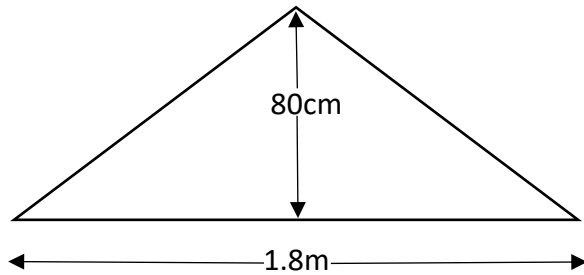
**39)** Calculate the area of this rectangle in  $\text{cm}^2$ .



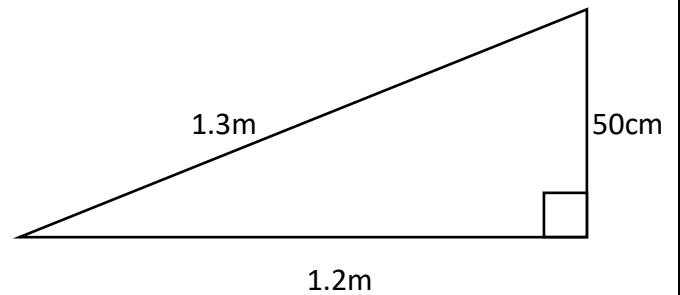
**40)** Calculate the perimeter of this rectangle in mm.



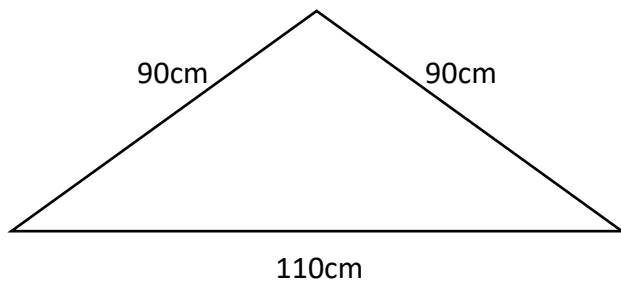
**41)** Calculate the area of this triangle in  $\text{m}^2$ .



**42)** Calculate the perimeter of this triangle in cm.



**43)** Calculate the perimeter of this triangle in m.



**44)** Calculate the area of this triangle in  $\text{cm}^2$ .

