

## Converting Areas

Videos 350 on [www.corbettmaths.com](http://www.corbettmaths.com)

Examples

Workout



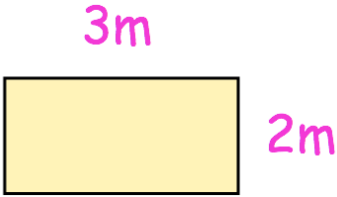
Click here



Scan here

Question 1: Shown is a rectangle with length 3m and width 2m

- (a) Find the area of the rectangle in  $m^2$
- (b) What is the length of the rectangle in cm?
- (c) What is the width of the rectangle in cm?
- (d) Find the area of the rectangle in  $cm^2$
- (e) Fill in the missing number using your answers to (a) and (d)



$1m^2 =$    $cm^2$

Question 2: Convert the following areas into  $cm^2$

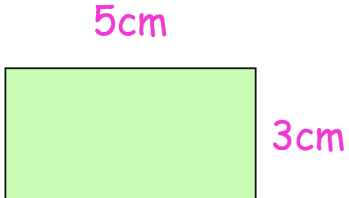
- |              |              |               |               |
|--------------|--------------|---------------|---------------|
| (a) $5m^2$   | (b) $9m^2$   | (c) $25m^2$   | (d) $104m^2$  |
| (e) $0.7m^2$ | (f) $4.3m^2$ | (g) $0.09m^2$ | (h) $60.2m^2$ |

Question 3: Convert the following areas into  $m^2$

- |                   |                     |                   |
|-------------------|---------------------|-------------------|
| (a) $40,000cm^2$  | (b) $70,000cm^2$    | (c) $180,000cm^2$ |
| (d) $600,000cm^2$ | (e) $3,830,000cm^2$ | (f) $2,500cm^2$   |
| (g) $900cm^2$     | (h) $4,421cm^2$     | (i) $12cm^2$      |

Question 4: Shown is a rectangle with length 5cm and width 3cm

- (a) Find the area of the rectangle in  $cm^2$
- (b) What is the length of the rectangle in mm?
- (c) What is the width of the rectangle in mm?
- (d) Find the area of the rectangle in  $mm^2$
- (e) Fill in the missing number using your answers to (a) and (d)



$1cm^2 =$    $mm^2$

Question 5: Convert the following areas into  $\text{mm}^2$

- (a)  $2\text{cm}^2$                       (b)  $8\text{cm}^2$                       (c)  $35\text{cm}^2$                       (d)  $730\text{cm}^2$   
(e)  $0.6\text{cm}^2$                       (f)  $1.4\text{cm}^2$                       (g)  $0.03\text{cm}^2$                       (h)  $0.057\text{cm}^2$

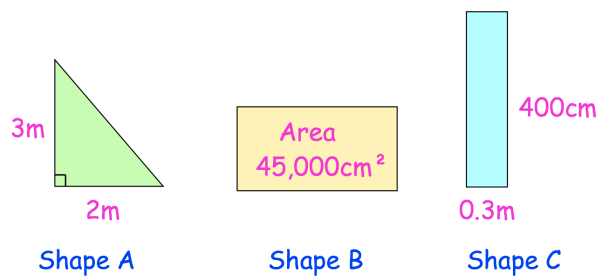
Question 6: Convert the following areas into  $\text{cm}^2$

- (a)  $500\text{mm}^2$                       (b)  $400\text{mm}^2$                       (c)  $2,200\text{mm}^2$   
(d)  $8,000\text{mm}^2$                       (e)  $91,000\text{mm}^2$                       (f)  $20\text{mm}^2$   
(g)  $17\text{mm}^2$                       (h)  $5\text{mm}^2$                       (i)  $0.3\text{mm}^2$

Question 7: Convert  $6\text{m}^2$  to  $\text{mm}^2$

## Apply

Question 1: Shown below are three shapes (not drawn accurately).



List the shapes in order of area, from smallest to greatest.

Question 2: Tommy has been asked to change  $800\text{cm}^2$  into  $\text{m}^2$   
He says:

“since there are 100 centimetres in 1 metres, the answer is  $8\text{m}^2$ ”

Explain why Tommy is incorrect.

Question 3: Rebecca is tiling her kitchen floor.  
The floor is a rectangle, measuring  $8\text{m}$  by  $6\text{m}$ .  
Each tile is a square measuring  $20\text{cm}$  by  $20\text{cm}$ .  
The tiles are sold in boxes of 10 and each box costs  $\text{£}8.50$

Work out the total cost of the tiles needed for the kitchen floor.

Answers



Click here



Scan here