

Understanding Length, Area and Volume

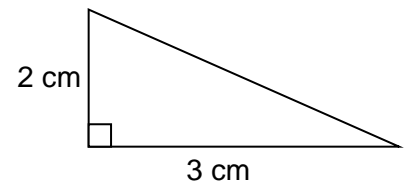
1. Match a term in column A to a term in column B to a term in column C. Explain your reasoning.

A	B	C
length	water	cm^2
area	string	cm^3
volume	paint	cm

2. The area of a rectangle with a length of 3 cm and a width of 2 cm is 6 cm^2 . Explain how you can show this, *without* using the formula for the area of a rectangle.

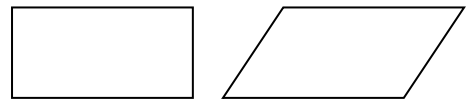
3. The area of this triangle is 3 cm^2 . Explain why this is true, *without* using the formula for the area of a triangle.

Hint: look at the diagram you drew for part (d).

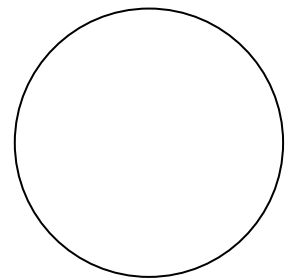


4. The rectangle and the parallelogram shown alongside have the same area. Explain why this is so.

Hint: A diagram could be *very* useful here.



5. This circle has an area of 10 cm^2 . Explain how a circle, which is *round*, can have an area measured in *square* centimetres.



6. How many rectangles can you draw that have an area of 12 cm^2 ?

7. Draw a shape – but not a rectangle! - that has an area of 12 cm^2 .

8. In your own words, define the terms:

length
area
volume