

May 4th

5-a-day

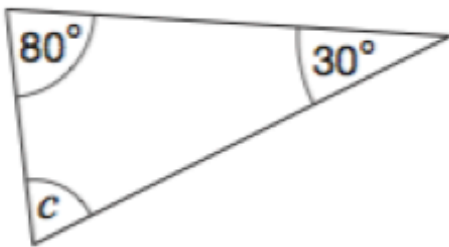
Numeracy

What is 56 divided by 8?

7

What is seven squared?

49



Find c

$$\begin{array}{r} 80 \\ + 30 \\ \hline 110 \end{array}$$

$70^\circ$

$$\begin{array}{r} 180 \\ - 110 \\ \hline 70 \end{array}$$



What number is the arrow pointing to?

3.27

Simplify

$$6b - 4b$$

$2b$

Simplify

$$2b \times 3c$$

$6bc$

A cuboid has sides length 3cm, 4cm and 5cm.

What is its volume?

$$3 \times 4 \times 5 \\ 60 \text{ cm}^3$$

What is its surface area?

$$\begin{array}{l} 3 \times 4 = 12 \quad 3 \times 5 = 15 \\ 4 \times 5 = 20 \\ 12 + 12 + 15 + 15 + 20 + 20 = 94 \text{ cm}^2 \end{array}$$

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Foundation

The nth term of a sequence is

$$2n + 3$$

Work out the first 5 terms

Solve

$$3w + 1 = 2w + 6$$

$$w + 1 = 6$$

$$w = 5$$

5, 7, 9, 11, 13

Calculate the mean

Age Frequency  $f \times x$

9 3

10 2

11 5

10

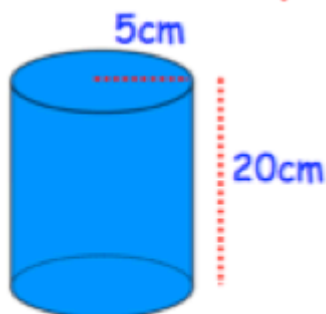
27

20

55

102

$$102 \div 10 = 10.2$$

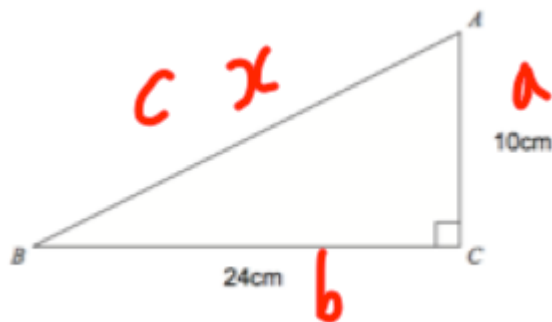


1 Litre = 1000cm<sup>3</sup>

Could the container hold 1.5 litres?

$$\pi \times 5^2 = 78.5 \dots$$
$$78.5 \dots \times 20 = 1570.8 \text{ cm}^3$$

yes



Find the length of AB

$$a^2 + b^2 = c^2$$
$$10^2 + 24^2 = x^2$$
$$676 = x^2$$
$$x = 26 \text{ cm}$$

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Higher

Make  $v$  the subject

$$E = \frac{1}{2}mv^2$$

$$2E = mv^2$$

$$\frac{2E}{m} = v^2$$

$$v = \sqrt{\frac{2E}{m}}$$

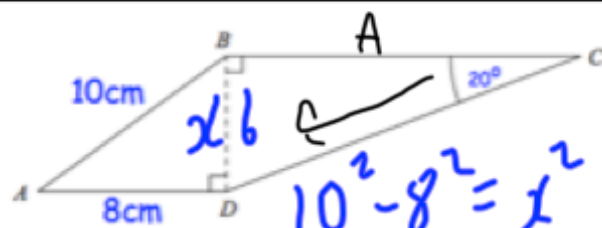
Simplify fully

$$\sqrt{5} \times \sqrt{15}$$

$$\sqrt{75}$$

$$\sqrt{25} \times \sqrt{3}$$

$$5\sqrt{3}$$



Find BC

$$10^2 - 8^2 = x^2$$

$$x = 6$$

$$\frac{6}{\tan 20} = 16.48 \text{ cm}$$

Work out  $p^2$  if  $p = 4 \times 10^6$

$$4 \times 10^6 \times 4 \times 10^6$$

$$= 16 \times 10^{12}$$

$$1.6 \times 10^{13}$$

Prove  $(2n + 3)^2 - (2n - 3)^2$  is a multiple of 8.

$$(2n+3)(2n+3) - (2n-3)(2n-3)$$

$$4n^2 + 12n + 9 - (4n^2 - 12n + 9) = 24n$$

$8(3n)$