

April 9th

5-a-day

Numeracy



A tin weighs 300g

How many more grams than 1kg, is the mass of four tins?

$$300 \times 4 = 1200$$
$$1200 - 1000 = 200g$$

$$24p + 30p + 63p =$$

Give your answer in pounds

$$£1.17$$

1 litre costs 60p

4 litres costs?

$$£2.40$$

$\frac{1}{4}$ litre costs?

$$60 \div 4 = 15p$$

What fraction of 25 is 5?

$$\frac{5}{25} = \frac{1}{5}$$

Office Hours

9am to 11:30am

2pm to 4:30pm

The office is open Monday to Friday

How many hours is the office open each week?

$$2.5 \text{ hrs} \quad 5 \times 5 = 25 \text{ hrs}$$

Find the nth term

9 13 17 21

$$4n + 5$$

Find the 100th term

$$405$$

A box has 200 pencils.

$\frac{3}{4}$ are sharpened, the remainder are not.

How many are not sharpened?

$$\frac{1}{4} \text{ of } 200 = 50$$

Complete this table for $y = 4x - 2$

x	-3	-2	-1	0	1	2	3
y	-14	-10	-6	-2	2	6	10

Find x

Score 1 2 3 4

Probability 0.4 0.4 x x

$$0.4 + 0.4 = 0.8$$

$$1 = 0.1$$

$$1 - 0.8 = 0.2 \quad 0.2 \div 2 = 0.1$$

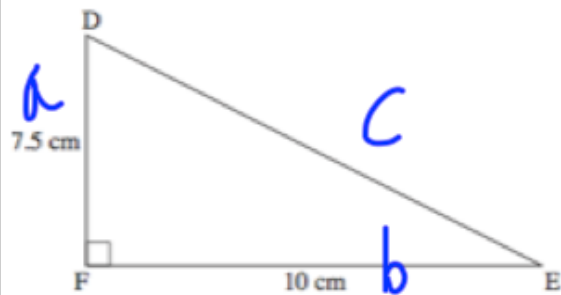
Calculate the length of DE

$$a^2 + b^2 = c^2$$

$$7.5^2 + 10^2 = c^2$$

$$c^2 = 156.25$$

$$c = 12.5$$



April 9

5-a-day

Higher

Solve

$$\frac{3x+2}{x-1} + 3 = 4$$

$$\frac{3x+2}{x-1} = 1$$

$$3x+2 = x-1$$

$$2x+2 = -1$$

$$2x = -3$$

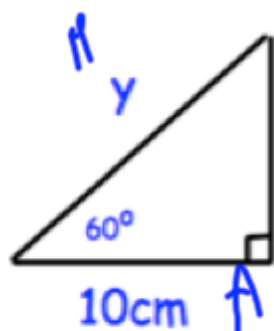
$$x = -1.5$$

Solve

$$y^2 + y - 30 = 0$$

$$(y+6)(y-5) = 0$$

$$y = -6 \text{ or } y = 5$$



$$\frac{10}{\cos 60}$$

Find y

$$= 20 \text{ cm}$$

Factorise

$$9y^2 - 49w^2$$

$$(3y+7w)(3y-7w)$$

A sector has side length 4cm.

The area of the sector is 10 cm^2

What is the size of the angle which describes the sector?

$$\frac{\theta}{360} \times \pi \times 4^2 = 10$$

$$\frac{\theta}{360} = 0.1989 \dots$$

$$\theta = 71.62^\circ$$