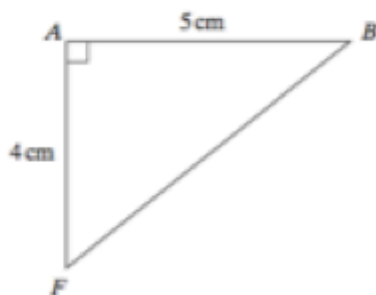


Write  $\frac{3}{4}$  as a decimal.

0.75



What is the area of this triangle?

$10\text{cm}^2$

5 11 23 ....

The rule for this sequence is:

"Multiply by 2 and then add 1"

What are the next two numbers in the sequence?

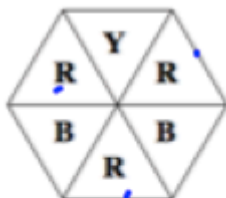
47 95

A TV normally costs £420

In a sale, there is a 15% discount

What is the discount in pounds?

$$\begin{array}{r} 42 \\ 21 \\ \hline \pounds 63 \end{array}$$



What is the probability of a B?

$\frac{2}{6} = \frac{1}{3}$

If the spinner is spun 100 times, how many R's would you expect?

50

Write 42 as a product of primes



$$2 \times 3 \times 7$$

Solve

$$5x + 10 = 3x + 4$$

$$2x + 10 = 4$$

$$2x = -6$$

$$x = -3$$

A car travels for 7 hours at 25 miles per hour, then for 3 hours at 50 miles per hour.

What is the total distance travelled?

$$d = s \times t$$

$$\begin{array}{r} 7 \times 25 = 175 \text{ miles} \\ 3 \times 50 = 150 \text{ miles} \\ \hline 325 \text{ miles} \end{array}$$

What is the average speed for the whole journey?

$$s = d \div t$$

$$325 \div 10$$

$$32.5 \text{ mph}$$

Harry is making 400kg of mortar. The ratio of sand and cement is 4:1

What is the weight of cement needed?

$$400 \div 5 = 80 \text{ kg}$$

$$80 \times 1 = 80 \text{ kg}$$

April 17

5-a-day

Higher

Work out, in standard form.

$$2.3 \times 10^9 \times 5 \times 10^8$$

$$11.5 \times 10^{11}$$

$$1.15 \times 10^{12}$$

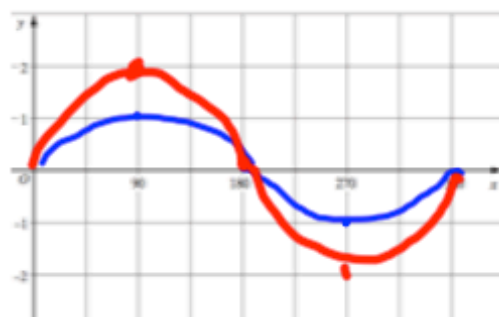
Simplify  $\sqrt{20}$

$$\sqrt{4} \times \sqrt{5}$$

$$= 2\sqrt{5}$$

Sketch  $y = \sin x$

Blue



On the same graph sketch  $y = 2\sin x$

Red

cylinder

$$\pi \times 5^2 \times 10 = 250\pi$$

Sphere

$$V = \frac{4}{3} \pi r^3$$

$$250\pi = \frac{4}{3} \pi r^3$$

$$750 = 4r^3$$

$$\frac{750}{4} = r^3$$

$$r = \sqrt[3]{\frac{750}{4}} = 5.72 \text{ cm}$$

A cylinder has radius 5cm and length 10cm.

A sphere has the same volume as the cylinder.

What is the radius of the sphere?