

Work out $374 + 82 + 908$

1364

Work out $450 - 139$

311

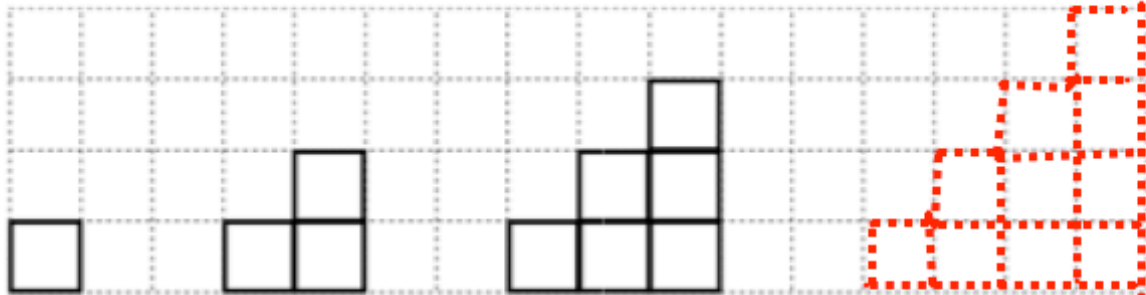
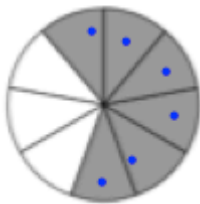


Diagram 1

Diagram 2

Diagram 3

Diagram 4



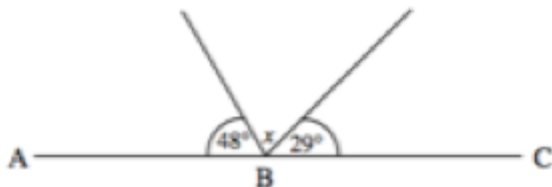
What fraction of this shape is shaded? In its simplest form?

$\frac{6}{9}$

$\frac{2}{3}$

What change should you get from £5 if you bought 3 packets of biscuits at 62p each?

£3.14



$$\begin{array}{r} 48 \\ + 29 \\ \hline 77 \end{array}$$

$$\begin{array}{r} 180 \\ - 77 \\ \hline 103^{\circ} \end{array}$$

$$\frac{3}{7} + \frac{1}{3} = \frac{9}{21} + \frac{7}{21} = \frac{16}{21}$$

The chance of James scoring a goal in a football match is $\frac{1}{4}$.
He plays 20 games in a season. How many goals is he expected to score?

5

Use trial and improvement to solve $x^2 - x = 24$ to 1 decimal place

5.4

| x | $x^2 - x$ | Comment |
|------|-----------|---------|
| 5 | 20 | ↓ |
| 6 | 30 | ↑ |
| 5.5 | 24.75 | ↑ |
| 5.4 | 23.76 | ↓ |
| 5.45 | 24.2525 | ↑ |
| | | |
| | | |
| | | |



Estimate $\frac{7.01^2 + 1.018}{4.981}$

$$\approx \frac{7^2 + 1}{5} = \frac{50}{5} = 10$$

April 19

5-a-day

Higher

Jack completes a journey in 2 stages.

In stage 1, Jack drives at 60 mph for 1 hour 45 minutes.

How far does he travel in stage 1?

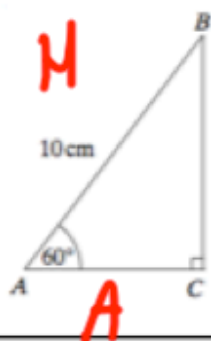
$$60 \times 1.75$$

$$105 \text{ miles}$$

Altogether Jack travels 120 miles in 2 hours 30 minutes.

What is his average speed in stage 2?

$$\frac{120}{2.5} = 48 \text{ mph}$$



$\cos(60)$

Calculate the length of AC

$$\cos(60) \times 10$$

$$5$$

Find the equation of the straight line through (0, 5) which is perpendicular to the line $y = 4x + 1$

$$m = -\frac{1}{4}$$

$$y = -\frac{1}{4}x + 5$$

Convert $0.0454545454545\dots$ into a fraction

$$x = 0.04545\dots$$

$$10x = 0.4545\dots$$

$$1000x = 45.45\dots$$

$$10x = 0.4545\dots$$

$$990x = 45$$

$$x = \frac{45}{990} = \frac{1}{22}$$