

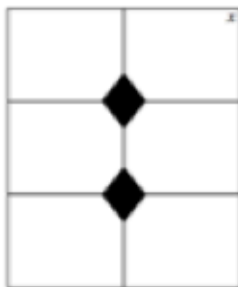
What time is shown?

1 hour 45 mins
or 1.75 hours.

What is the difference in grams between 1.25kg and 760g?

$$\begin{array}{r} 1250 \\ - 760 \\ \hline 490 \end{array}$$

0.49kg or 490g



a) what is the name given to the shaded shapes?

rhombus

b) What type of angle is x?

right

The total pay in pounds for a salesman is:

Total pay = Basic wage + tickets sold x 3

$$35 \times 3 = 105$$

$$120 + 105$$

a) How much does the salesman get for each ticket sold?

£3

b) If the basic wage is £120 and he sells 35 tickets, what is the total pay?

225

$I = PRT$

Find the value of I when $P = 20$,
 $R = 8$ and $T = 0.5$

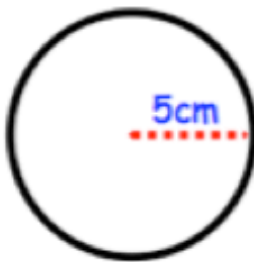
$$\begin{aligned} &20 \times 8 \times 0.5 \\ &160 \times 0.5 \\ &= 80 \end{aligned}$$

Solve $5(x + 3) = 40$

$$\begin{aligned}5x + 15 &= 40 \\5x &= 25 \\x &= 5\end{aligned}$$

Solve $9x + 1 = 7x + 13$

$$\begin{aligned}2x + 1 &= 13 \\2x &= 12 \\x &= 6\end{aligned}$$

Calculate the area of the circle.
Leave your answer in terms of π

$$\begin{aligned}\pi \times 5^2 \\ \pi \times 25 \\ = 25\pi \text{ cm}^2\end{aligned}$$

Tom and Will share £60 in the ratio 2:3.

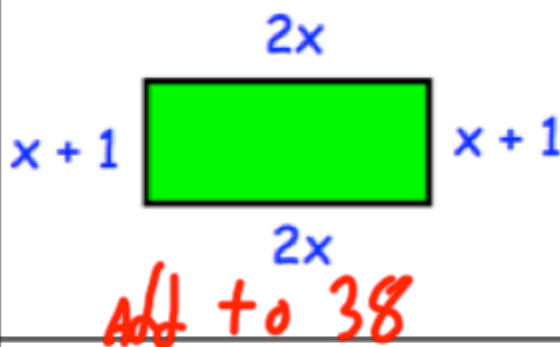
How much do they each receive?

$$\begin{aligned}\text{Tom } \pounds 24 \\ \text{Will } \pounds 36\end{aligned}$$

$$2 + 3 = 5 \quad 60 \div 5 = 12$$

$$2 \times 12 = \pounds 24$$

$$3 \times 12 = \pounds 36$$



The perimeter of the rectangle is 38cm.

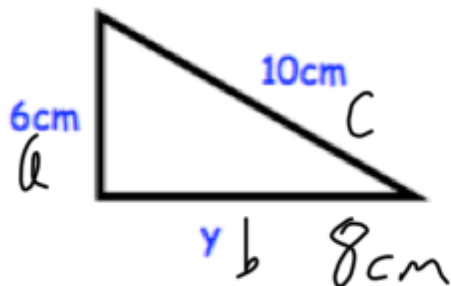
$$2x + x + 1 + 2x + x + 1 = 38$$

Find x.

$$6x + 2 = 38$$

$$6x = 36$$

$$x = 6$$



Shown is a right-angled triangle

Find y.

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

$$6^2 + y^2 = 10^2$$

$$36 + y^2 = 100$$

$$y^2 = 64 \quad y = 8$$

March 10th

5-a-day

Higher

Expand and simplify

$$(x+4)^2$$

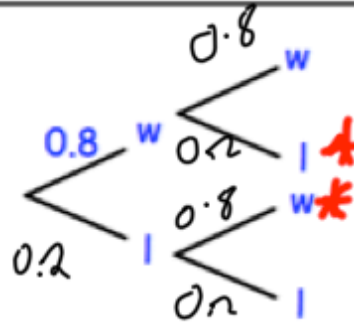
$$(x+4)(x+4)$$

$$x^2 + 4x + 4x + 16$$

$$x^2 + 8x + 16$$

The probability of a team winning a match is 0.8.

Complete the tree diagram



The team plays two matches

Work out the probability of the team winning two matches

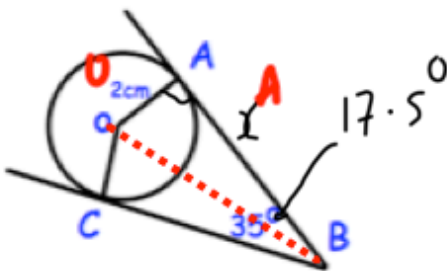
$$0.8 \times 0.8 = 0.64$$

Work out the probability of the team winning exactly one match

$$wl \quad 0.8 \times 0.2 = 0.16$$

$$lw \quad 0.2 \times 0.8 = 0.16$$

$$\underline{\underline{0.32}}$$



Find the length of the line AB

$$\tan 17.5 = \frac{2}{x}$$

$$x = \frac{2}{\tan 17.5} = 6.34 \text{ cm}$$

Find the length of the line OB

$$2^2 + 6.34^2 = x^2$$

$$44.23 \dots = x^2$$

$$x = OB = 6.65 \text{ cm}$$

Find the length of the line AC

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$145^\circ \quad AC^2 = 2^2 + 2^2 - 8 \cos 145$$

$$\therefore AC = \sqrt{14.55} = 3.81 \text{ cm}$$