

## Calculator Foundation + GCSE Revision

Use your calculator to work

$$\text{out } 3\frac{1}{2} \times 7\frac{2}{5}.$$

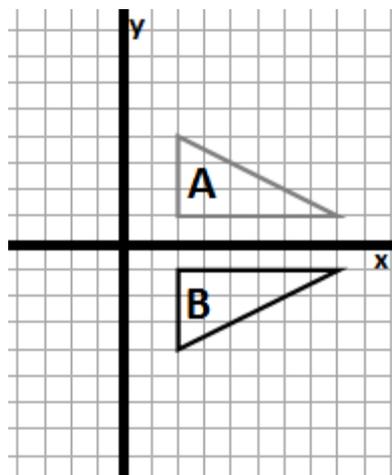
Mike and Connor share £1080 in the ratio 4 : 8. How much does Mike get?

$$\text{Solve } 3x + 10 = 31.$$

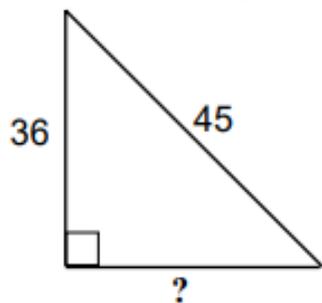
Write 7% as a decimal.

Increase £43 by 16%.

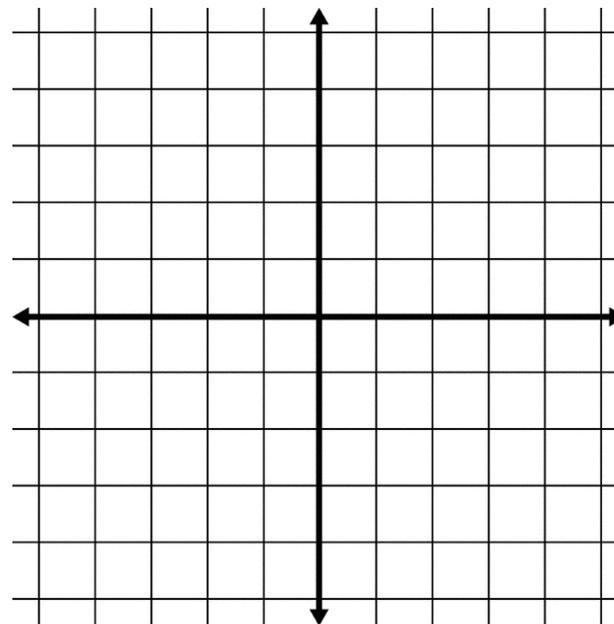
Shape A is transformed to give Shape B. Describe the transformation.



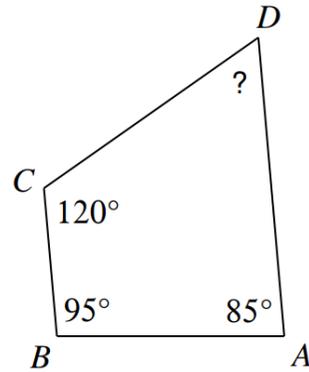
Find the missing length.



Plot the graph of  $y = x - 1$  on the grid below.



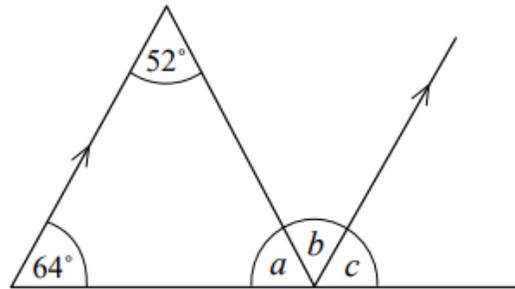
Work out the marked angle.



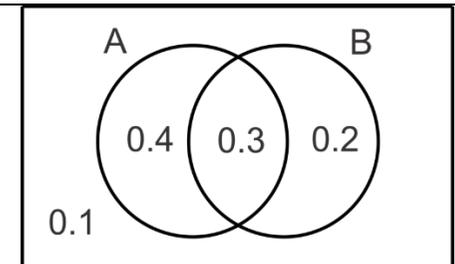
Make  $r$  the subject of the formula  $C = 2\pi r$ .

Work out  $13 + 2 \times \sqrt[3]{64}$ .

Work out the size of angles  $a$ ,  $b$  and  $c$ .



A circle has area  $40\text{cm}^2$ . Find its diameter. Round your answer to two decimal places.



- a) Find  $P(A \cup B)$ .  
b) Find  $P(A')$ .

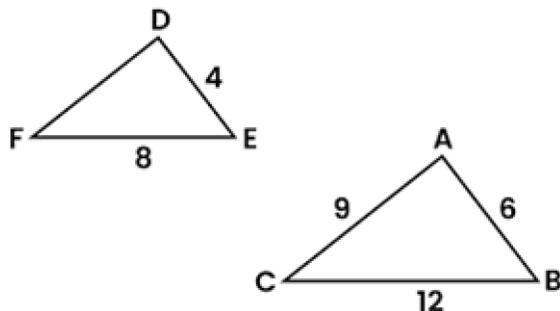
When  $a = -3$ , find the value of  $5a^2 - 2a$ .

Jo and Dan share sweets in the ratio 10 : 4. Jo has 18 more sweets than Dan. How many sweets does Dan have?

There are four types of chocolate in a box: strawberry, orange, hazelnut and mint. A chocolate is picked at random. The probabilities are shown in the table below. Find the value of  $x$ .

Type	Strawberry	Orange	Hazelnut	Mint
Probability	0.3	$x$	$x$	0.2

Triangle DEF is similar to triangle ABC. What's the length of side DF?



Super Squash costs £15 for 6 bottles and Fab Fizz costs £18 for 8 bottles. Which is better value for money?

a) Estimate:  

$$\frac{43.1 \times \sqrt{96.3}}{2.38^2}$$

b) Use your calculator to work out:

$$\frac{43.1 \times \sqrt{96.3}}{2.38^2}$$

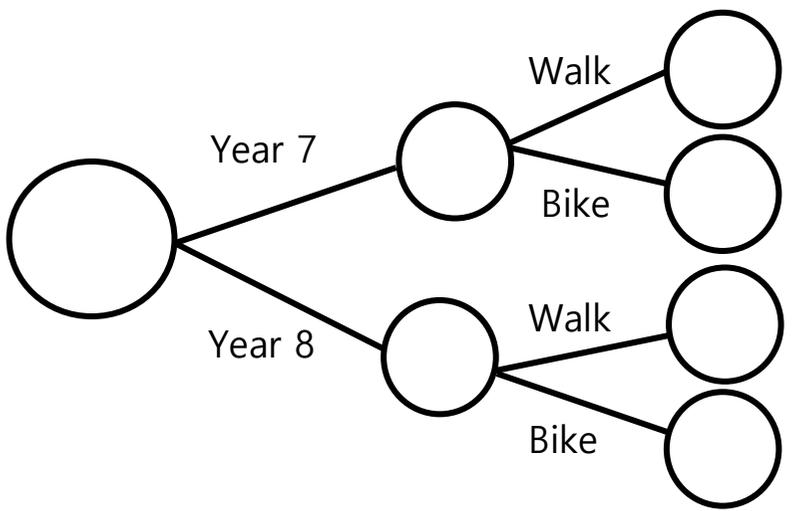
Round your answer to 2 decimal places.

The two way table shows how a group of 100 pupils get to school. Complete the two way table then fill in the frequency tree.

	Year 7	Year 8	Total
Walk		34	
Bike	31		
Total		44	100

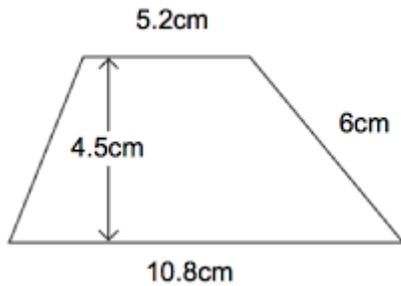
Are the following numbers prime?

- a) 27
- b) 51
- c) 127



Find the midpoint of  $(-3, 5)$  and  $(7, 10)$ .

Work out the area of the trapezium.



Use your calculator to work out  $6.12 \times 10^7 \div 4.8 \times 10^2$ . Answer in standard form.

A cockroach moves at 85 cm per second. What's that in kilometres per hour?

What's the exterior angle of a regular decagon?

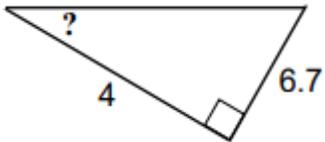
I bought a scarf in the sale. It was marked as 30% off. It cost me £10.50. What was the original price?

The cost of a jacket increases by £5. The new price is £85. Find the percentage increase.

Solve these simultaneous equations.

$$\begin{aligned} 3x + 5y &= 31 \\ 10x - y &= 15 \end{aligned}$$

Find the marked angle.



Given that £1 = \$1.30, how much is \$200 worth in pounds?

Find the gradient of the line joining  $(-3, 5)$  and  $(7, 10)$ .

# Calculator Foundation + GCSE Revision - ANSWERS

Use your calculator to work

$$\text{out } 3\frac{1}{2} \times 7\frac{2}{5}.$$

$$25\frac{9}{10} \text{ oe}$$

Mike and Connor share  
£1080 in the ratio 4 : 8. How  
much does Mike get?

$$\text{£360}$$

Solve  $3x + 10 = 31$ .

$$x = 7$$

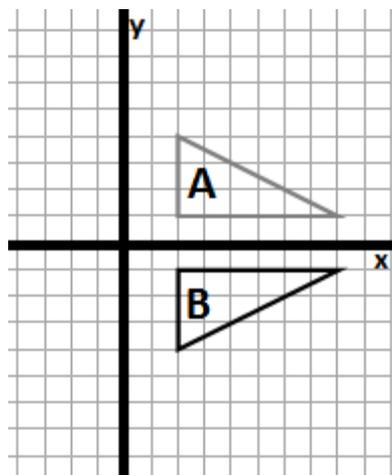
Write 7% as a decimal.

$$0.07$$

Increase £43 by 16%.

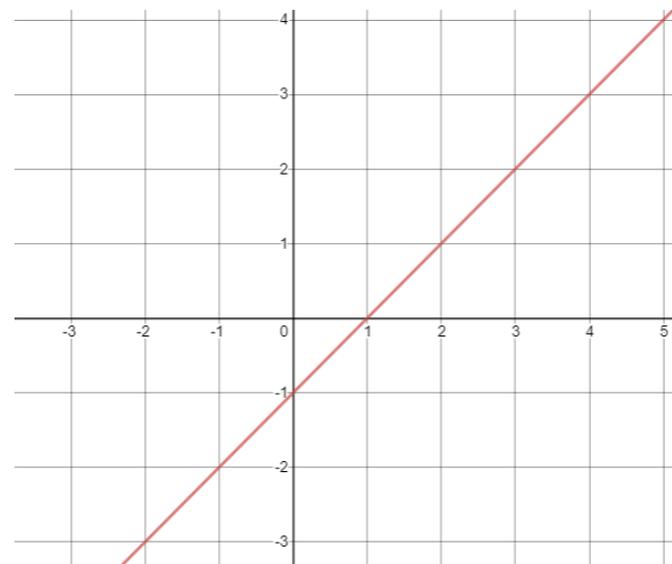
$$\text{£49.88}$$

Shape A is transformed to  
give Shape B. Describe the  
transformation.

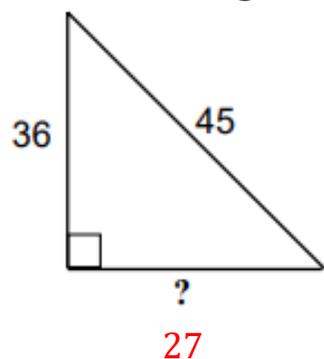


Reflection in the  $x$ -axis  
(or reflection in  
the line  $y = 0$ )

Plot the graph of  $y = x - 1$  on the grid below.

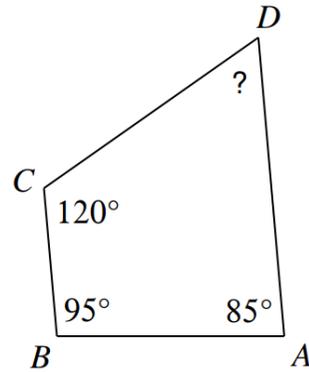


Find the missing length.



Work out the marked angle.

$60^\circ$



Make  $r$  the subject of the formula  $C = 2\pi r$ .

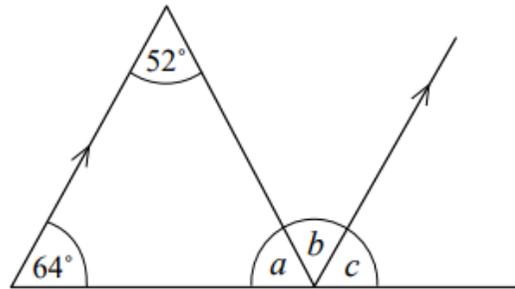
$$r = \frac{C}{2\pi}$$

Work out  $13 + 2 \times \sqrt[3]{64}$ .

$21$

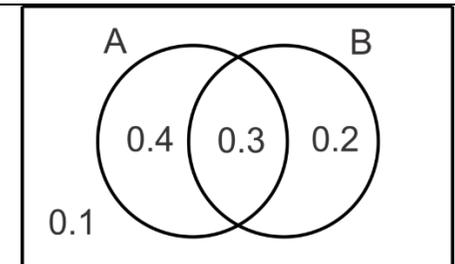
Work out the size of angles  $a$ ,  $b$  and  $c$ .

$$\begin{aligned} a &= 64^\circ \\ b &= 52^\circ \\ c &= 64^\circ \end{aligned}$$



A circle has area  $40\text{cm}^2$ . Find its diameter. Round your answer to two decimal places.

$7.14\text{cm}$



- a) Find  $P(A \cup B)$ .  $0.9$   
 b) Find  $P(A')$ .  $0.3$

When  $a = -3$ , find the value of  $5a^2 - 2a$ .

$51$

Jo and Dan share sweets in the ratio  $10 : 4$ . Jo has 18 more sweets than Dan. How many sweets does Dan have?

$12$

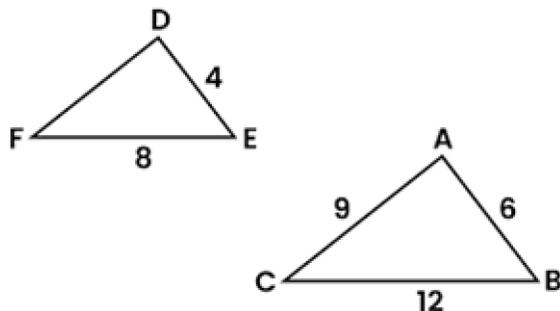
There are four types of chocolate in a box: strawberry, orange, hazelnut and mint. A chocolate is picked at random. The probabilities are shown in the table below.

Find the value of  $x$ .

$x = 0.25$

Type	Strawberry	Orange	Hazelnut	Mint
Probability	0.3	$x$	$x$	0.2

Triangle DEF is similar to triangle ABC. What's the length of side DF?



6

Super Squash costs £15 for 6 bottles and Fab Fizz costs £18 for 8 bottles. Which is better value for money?

SS £2.50 | FF £2.25  
Fab Fizz is best value

a) Estimate:  

$$\frac{43.1 \times \sqrt{96.3}}{2.38^2}$$

100

b) Use your calculator to work out:

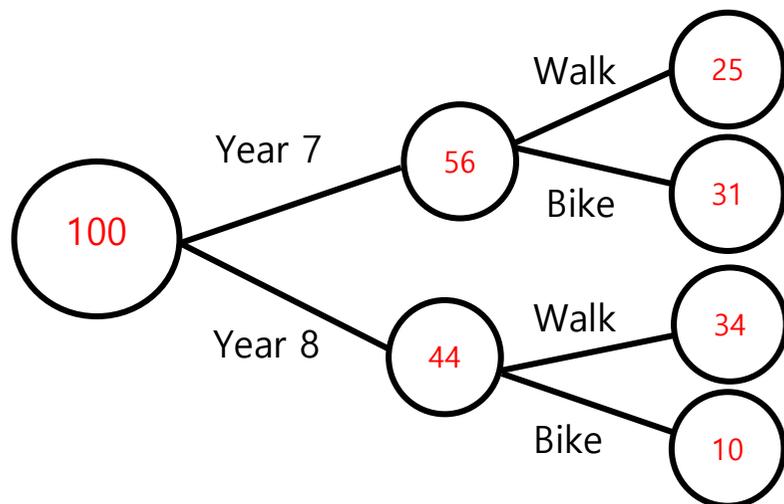
$$\frac{43.1 \times \sqrt{96.3}}{2.38^2}$$

Round your answer to 2 decimal places.

74.67

The two way table shows how a group of 100 pupils get to school. Complete the two way table then fill in the frequency tree.

	Year 7	Year 8	Total
Walk	25	34	59
Bike	31	10	41
Total	56	44	100



Are the following numbers prime?

(Could use FACT button on calculator to do this)

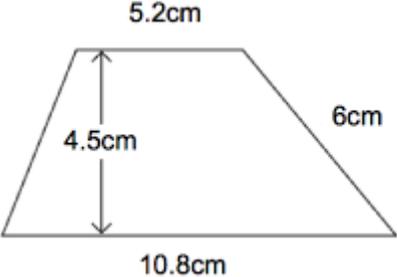
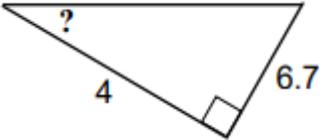
a) 27 No

b) 51 No

c) 127 Yes

Find the midpoint of  $(-3, 5)$  and  $(7, 10)$ .

(2, 7.5)

<p>Work out the area of the trapezium.</p>  <p><math>36\text{cm}^2</math></p>	<p>Use your calculator to work out <math>6.12 \times 10^7 \div 4.8 \times 10^2</math>. Answer in standard form.</p> <p><math>1.275 \times 10^5</math></p>	<p>A cockroach moves at 85 cm per second. What's that in kilometres per hour?</p> <p><math>3.06\text{km/h}</math></p>	<p>What's the exterior angle of a regular decagon?</p> <p><math>36^\circ</math></p>
<p>Find the marked angle.</p>  <p><math>59.2^\circ</math></p>	<p>I bought a scarf in the sale. It was marked as 30% off. It cost me £10.50. What was the original price?</p> <p><math>\text{£}15</math></p>	<p>The cost of a jacket increases by £5. The new price is £85. Find the percentage increase.</p> <p><math>6.25\%</math></p>	<p>Solve these simultaneous equations.</p> $3x + 5y = 31$ $10x - y = 15$ <p><math>x = 2, y = 5</math></p>
<p>Given that £1 = \$1.30, how much is \$200 worth in pounds?</p> <p><math>\text{£}153.85</math></p>	<p>Find the gradient of the line joining <math>(-3, 5)</math> and <math>(7, 10)</math>.</p> <p><math>\frac{1}{2}</math></p>		