

<p><u>PLACE VALUE, ROUNDING AND ESTIMATING</u></p> <p>a) Round 735923</p> <p>i) to the nearest 100</p> <p>ii) to two significant figures</p> <p>iii) Round 371.59 to 1 decimal place</p>	<p><u>TYPES OF NUMBER</u></p> <p>Write 180 as a product of prime factors.</p>
<p><u>ARITHMETIC INCLUDING DECIMALS</u></p> <p>Work out 3.17×2.9</p>	<p><u>NUMBER SQUARES</u></p> <p>a) Find the nth term 5, 11, 17, 23,</p> <p>b) Given the nth term of a sequence is $4n + 3$, give the first three terms.</p>
<p><u>FRACTIONS</u></p> <p>Work out</p> <p>a) $\frac{2}{9} + \frac{1}{3}$</p> <p>b) $1\frac{2}{5} \times \frac{3}{4}$</p>	<p><u>PERCENTAGES</u></p> <p>a) Calculate 14.7% of 3540</p> <p>b) Put in order smallest first $\frac{3}{5}$ $\frac{2}{3}$ 0.63 $\frac{11}{20}$ $\frac{33}{50}$</p>
<p><u>NEGATIVES/CALC/BIDMAS/INDICES</u></p> <p>a) Work out:</p> <p>-3×-5</p> <p>$-3 + -5$</p> <p>$-3 - -5$</p> <p>b) Write as a power of 5</p> $\frac{5^4 \times 5^3}{5^2}$	<p><u>RATIO</u></p> <p>The ratio of boys to girls in a school is 3:2. There are 1200 students in the school. How many are girls?</p>

SIMPLIFY ALGEBRA/ SUBSTITUTION

- a) Simplify $3x + 5y - 2x - 7y$
- b) $p^5 \times p^3$
- c) If $x = -3$ work out the value of $x^2 - 2x$

ALGEBRA BRACKETS

- a) Expand $3(2p + 5)$
- b) Factorise $x^2 - 3x$
- c) Expand $(x + 7)(x - 3)$

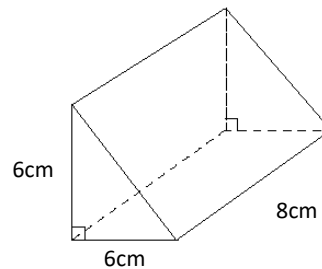
SOLVE EQUATIONS

Solve

- a) $3a + 9 = 27$
- b) $5a - 8 = 3a + 5$

AREA/ PERIMETER/ VOLUME

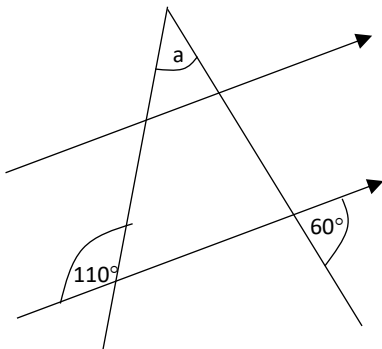
- a) Calculate the volume:



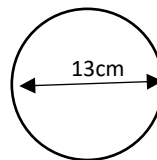
- b) A cube has sides 3cm. Calculate its total surface area.

ANGLES

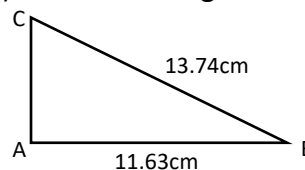
Calculate angle a.

**CIRCLES/ PYTHAGORAS/MEASURES/ SPEED**

- a) Calculate its area to 1dp.



- b) Calculate length AC to 2dp.

**AVERAGES**

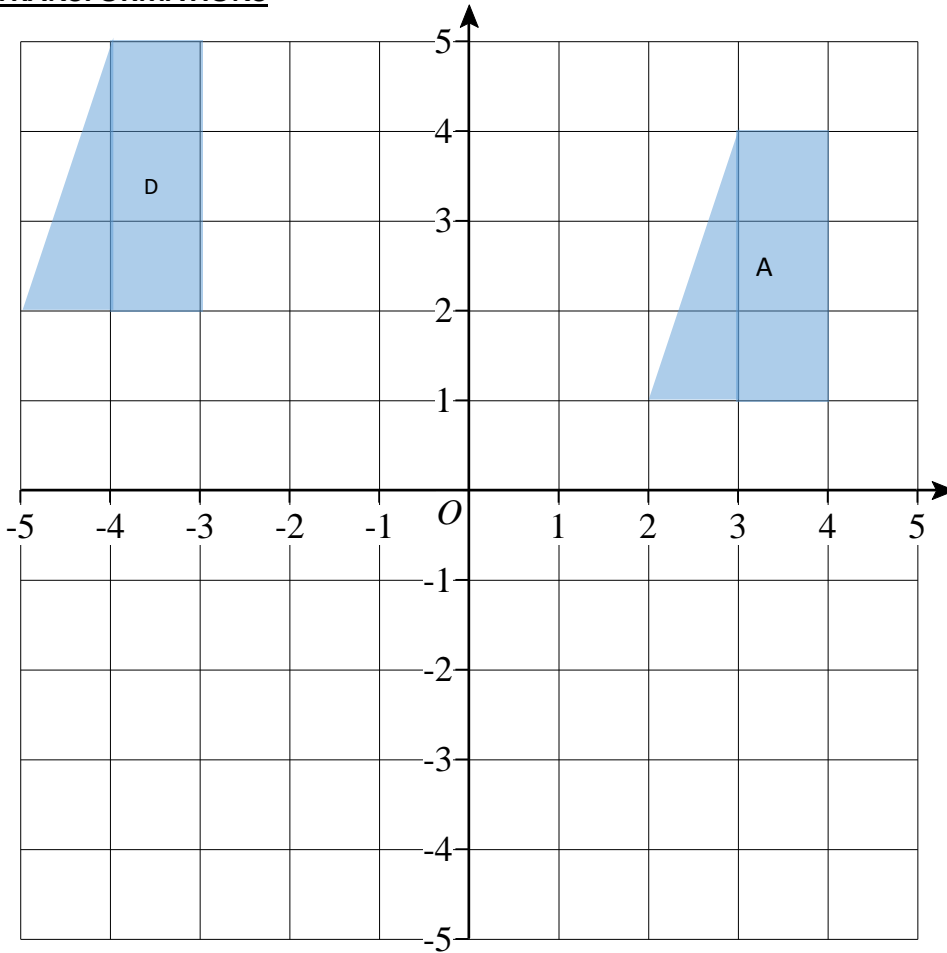
Weight(kg)	Frequency		
$50 < w \leq 60$	7		
$60 < w \leq 70$	13		
$70 < w \leq 80$	15		
$80 < w \leq 90$	5		

- a) Modal group
- b) Mean =

NEW CONTENT MISCELLANEOUS

- a) Write in standard form
3450000
0.000000017
- b) Work out 5^{-2}
- c) A door was 2.7m to 1dp. Complete the error interval.
_____ $\leq h <$ _____

TRANSFORMATIONS

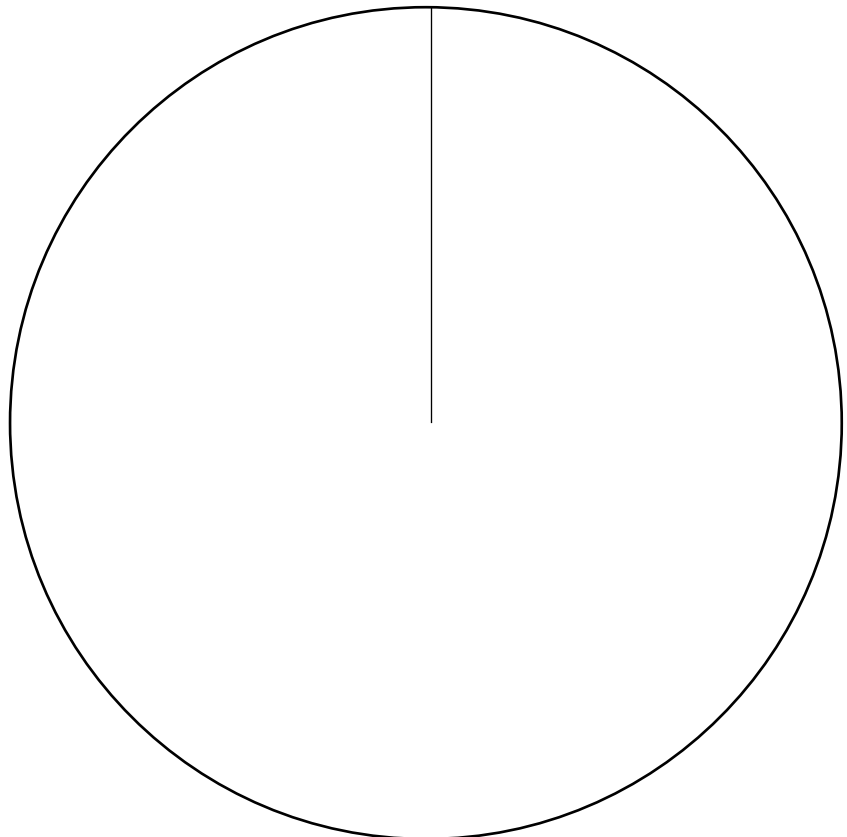


- Reflect A in the line $x = 1$. Label it B.
- Rotate A 90° clockwise centre $(-1, 1)$. Label it C.
- Describe the single transformation to get from A to D.

STATISTICAL DIAGRAMS/ PROBABILITY

Draw a pie chart for this data.

Favourite colour	Frequency
Blue	27
Red	42
Yellow	30
Green	15
Pink	6

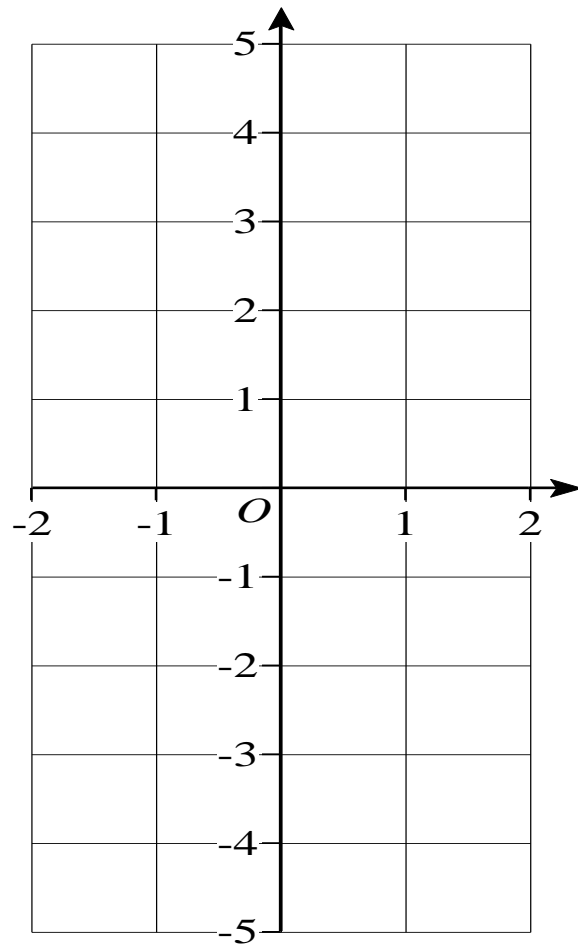


GRAPHS

- a) Draw the graph of $y = 3x - 2$
by completing the table below:

x	-2	-1	0	1	2
y					

- b) Solve the equation $3x - 2 = 2$
Use the graph to help.



CONSTRUCTIONS

Shade the region which is closer to B than A and is less than 5cm from A. Show your construction lines.

