

<p><u>PLACE VALUE, ROUNDING AND ESTIMATING</u></p> <p>a) Round 358.26 to:</p> <p>i) 1 decimal place</p> <p>ii) 1 significant figure</p> <p>b) Tickets cost £6.87. Approximately how much would it be for 21 tickets.</p>	<p><u>TYPES OF NUMBER</u></p> <p>Write 72 as a product of prime factors.</p>
<p><u>ARITHMETIC INCLUDING DECIMALS</u></p> <p>Work out 312×24</p>	<p><u>NUMBER SQUARES</u></p> <p>a) Find the nth term:</p> <p>i) 2, 9, 16, 23</p> <p>ii) 10, 8, 6, 4</p> <p>b) Given $3n + 1$, find the first three terms of the sequence.</p>
<p><u>FRACTIONS</u></p> <p>Work out:</p> <p>a) $\frac{3}{5} - \frac{1}{4}$</p> <p>b) $1\frac{2}{3} \times 2\frac{1}{4}$</p>	<p><u>PERCENTAGES</u></p> <p>a) James scored 135 out of 180 in a test. What % did James get?</p> <p>b) A wage of £420 was increased by 7.5%. Calculate the new wage.</p>
<p><u>NEGATIVES/CALC/BIDMAS/INDICES</u></p> <p>a) Work out</p> <p>-3×7</p> <p>$-3 + -7$</p> <p>$-10 \div -2$</p> <p>$-10 - -2$</p> <p>b) Work out</p> <p>$5 \times 3 + 2 \times 4^2$</p>	<p><u>RATIO</u></p> <p>a) Share £420 in the ratio 4:3.</p> <p>b) 4 buns use 200g of flour. I have 1.6 kg of flour how many buns can I make?</p>

SIMPLIFY ALGEBRA/ SUBSTITUTION

a) Simplify $3pq + 4p - pq - 2q + p$

b) A formula for finding the cost of a holiday is $C = 20n + 50$ where n is the number of days. Find the cost for 2 weeks.

ALGEBRA BRACKETS

Expand and simplify

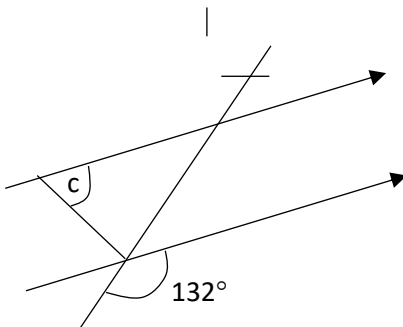
$(2x + 5)(x - 3)$

SOLVE EQUATIONS

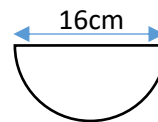
Solve

a) $5x - 9 = 12 - 2x$

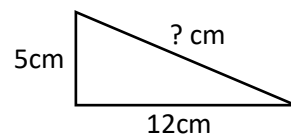
b) $2(3p - 4) = 7$

AREA/ PERIMETER/ VOLUMEa) This rectangle has area 42cm^2 . Find the width?b) A cube has volume 125cm^3 . Find the side of the cube.**ANGLES**Calculate angle c **CIRCLES/ PYTHAGORAS/MEASURES/ SPEED**

a) Calculate the perimeter of this semi-circle.



b) Calculate the length.

**AVERAGES**

Height(cm)	Freq		
$140 < h \leq 150$	16		
$150 < h \leq 160$	38		
$160 < h \leq 170$	19		
$170 < h \leq 180$	7		

a) Estimate the mean height.

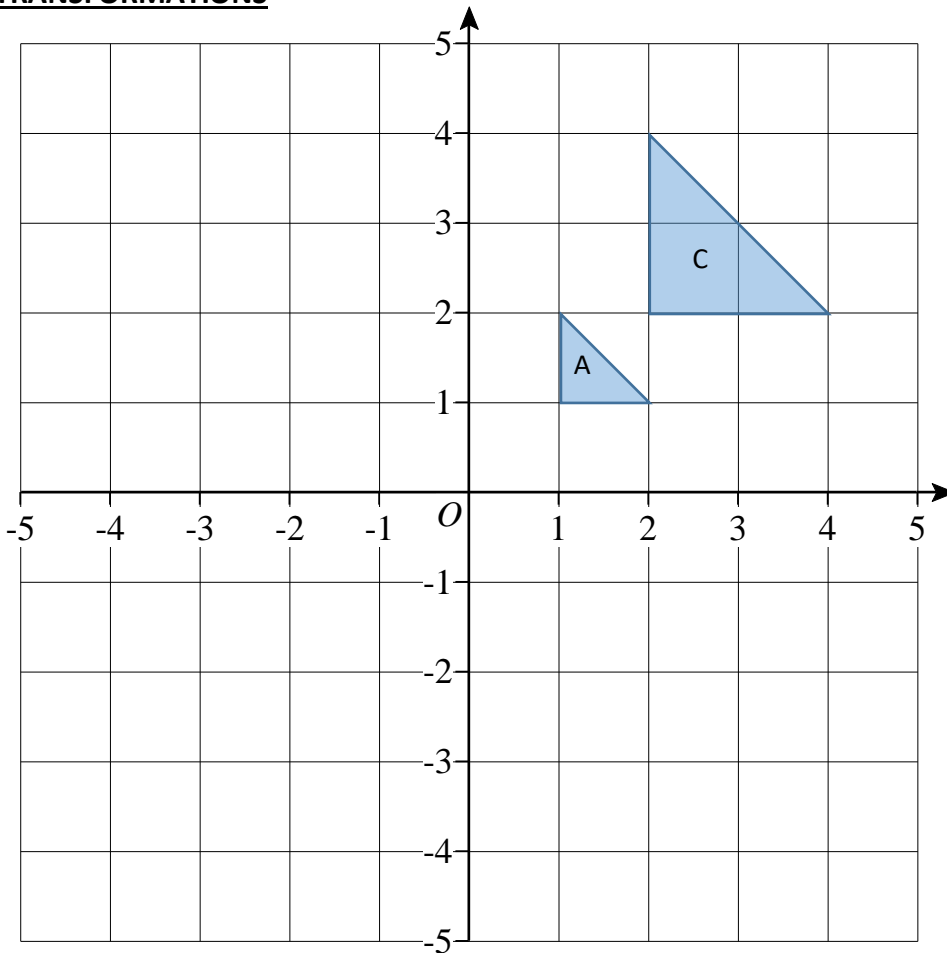
b) Why is it only an estimate?

NEW CONTENT MISCELLANEOUS

a) A wage was increased by 12%. The new wage was £280. What was the wage before the increase?

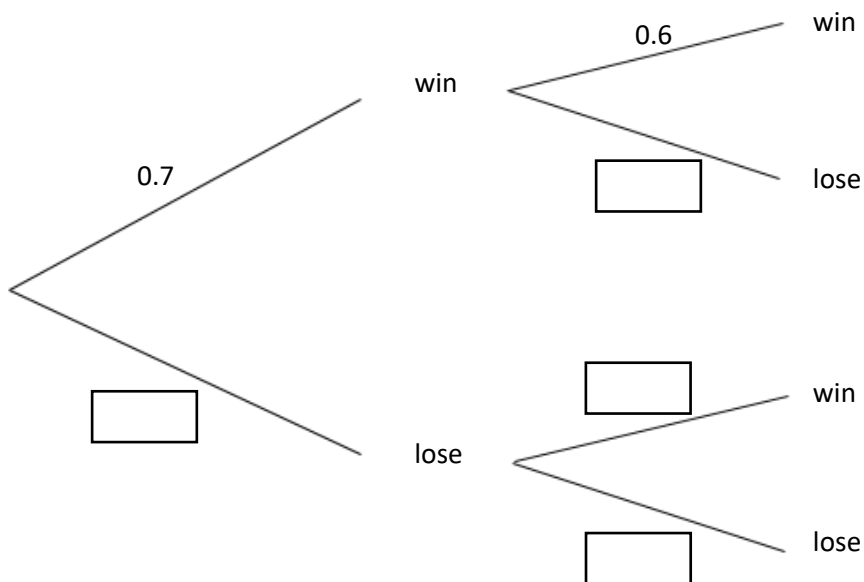
b) Compound interest is 3.5% each year. I have £4000. How much is in the account after 2 years?

TRANSFORMATIONS



- Rotate A 90° clockwise to give shape B, centre (0, 0).
- What single transformation is also the same from A to B?
- Describe the single transformation to get from A to C.
- Translate A in the vector $\begin{pmatrix} -4 \\ 2 \end{pmatrix}$. Label it D.

STATISTICAL DIAGRAMS/ PROBABILITY



The probability the school team win a football match is 0.7.

The probability the school team win a rugby match is 0.6.

- Complete the tree diagram. Fill in the missing boxes.
- Work out the probability the school team wins one game only.

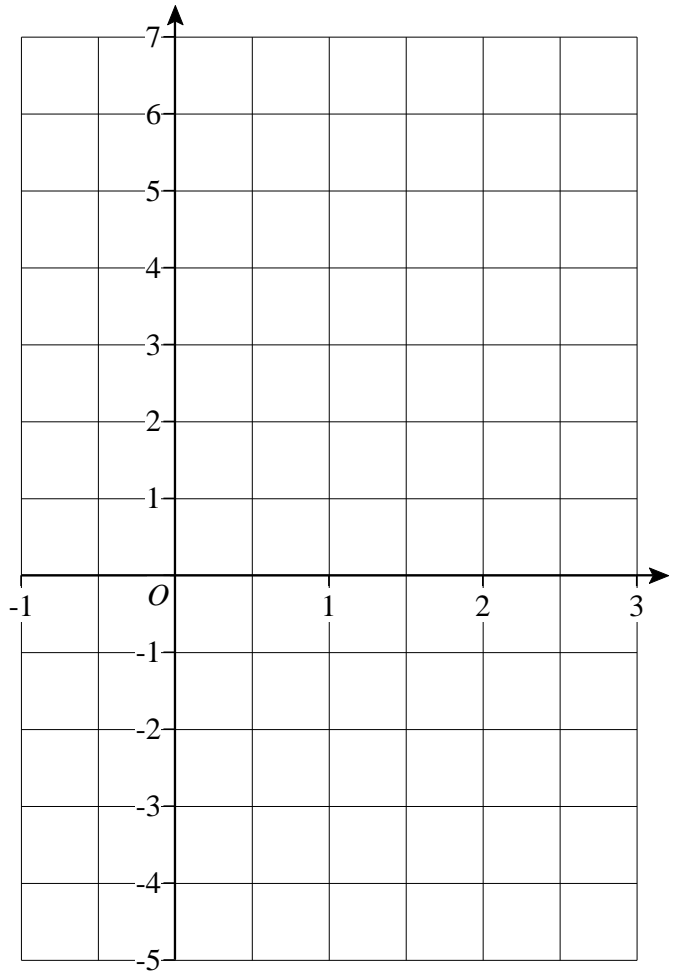
GRAPHS

- a) Complete the table and draw the graph of $y = 4 - 3x$.

x	-1	0	1	2	3
y		4		-2	

- b) Given the graph of $y = 2x + 5$, give the:

- Gradient
- y-intercept



CONSTRUCTIONS

Shade the region closer to AB than BC and at least 4cm from D.

