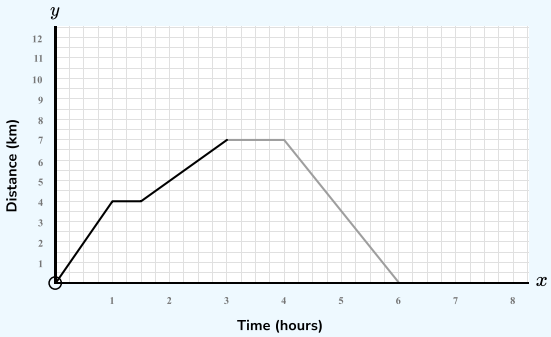
THIRD SPACE LEARNING

November Advanced Information:

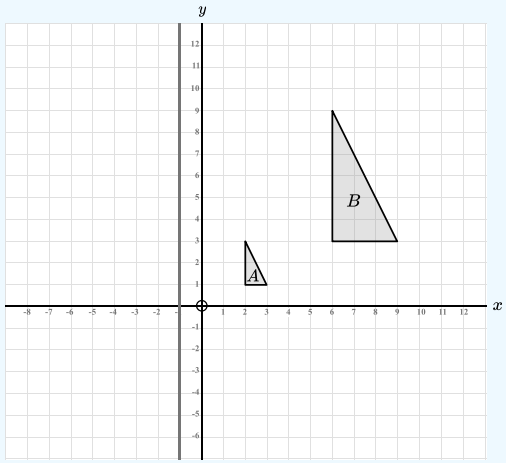
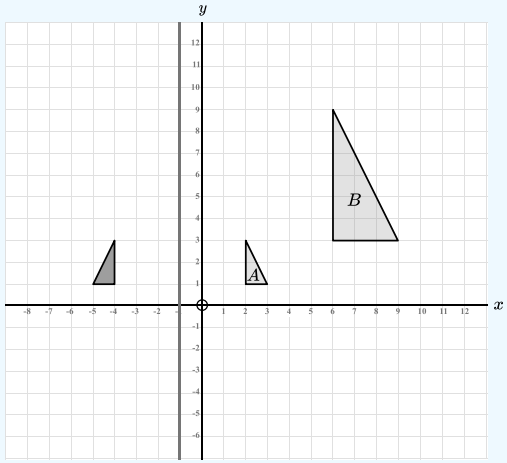
Paper 3 Foundation Mark Scheme

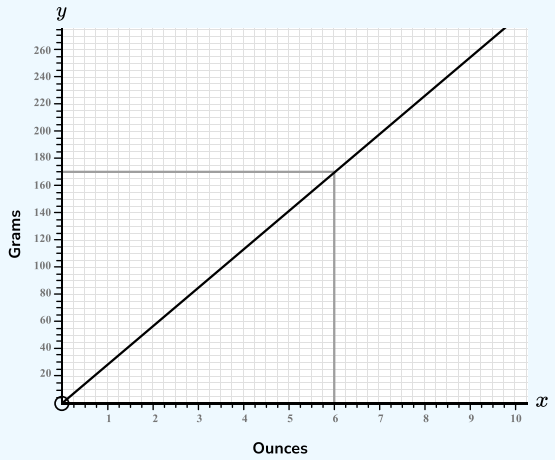
Edexcel

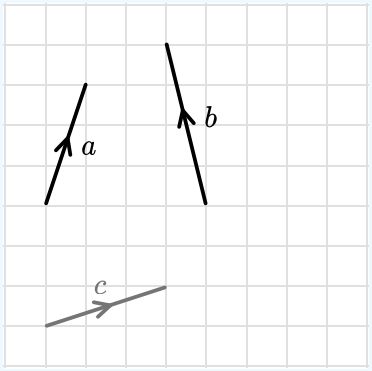
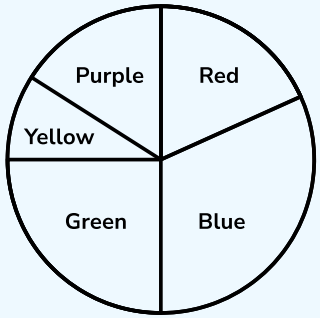
Question	Working	Answer	Notes
Q1	$12 \div 4 = 3$	3	A1 cao
Q2		18	B1 cao
Q3	$3.9 \times 1000 = 3900$	3900g	A1 cao
Q4		0.103, 0.11, 0.111, 0.13, 1.03	B1 cao
Q5		20 / twenty / 2 tens	B1 a correct answer
Q6a		7.785640646	M1 $\frac{19.46410162}{2.5}$ seen or awrt 7.7 A1 7.785640646
Q6b		7.79	B1 cao
Q7a		13, 21	A1 13 A1 21
Q7b		No and 21, 34, 55, …	M1 Sequence continued up to at least 55 C1 Clear conclusion based on correct working
Q8	$15 \div 6 = 2.5$ $100 \times 2.5 = 250$g $2 \times 2.5 = 5$ $250 \times 2.5 = 625$ml	250g flour 5 eggs 625ml milk	M1 Identifying that she needs 2.5 lots of the recipe M1 Correctly finding the amount of one ingredient A1 All three ingredients correct
Q9	$\frac{2}{3} = 0.66...$ $\frac{7}{9} = 0.77...$ $\frac{5}{9} = 0.55...$ $\frac{5}{11} = 0.4545...$	$\frac{5}{9}$	M1 At least two fractions correctly written as decimals A1 $\frac{5}{9}$ $\frac{5}{9}$ scores both marks even if working not seen

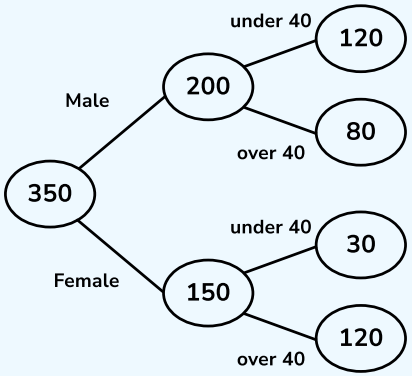
Question	Working	Answer	Notes
Q10a		5km	B1 cao
Q10b	$Time = \frac{Distance}{Speed} = \frac{7}{3.5} = 2$ hours 		B1 horizontal line from (3 , 7) to (4 , 7) M1 7 ÷ 3.5 or 2 hours seen A1 Correct final line from (4 , 7) to (6 , 0)
Q10c	5.4 ÷ 8 = 0.675 0.675 × 5 = 3.375	3.375 mph	M1 Attempt to divide by 8 and multiply by 5 or attempt at equivalent correct method A1 3.375
Q11			A1 £852.68 A1 £50 A1 £82.99
Q12		She has assumed that the two angles are equal. She may not be correct.	C1 A statement that the assumption is the two angles are equal C1 Indicating she may not be correct/she is not correct

Date	Description	Paid in	Paid out	Balance
31/08/22	Wages	£1540.20		£1552.68
01/09/22	Rent		£700	**£852.68**
03/09/22	Bill		£63.51	£789.31
04/09/22	Money transfer	**£50**		£839.31
04/09/22	Card payment		**£82.99**	£756.32

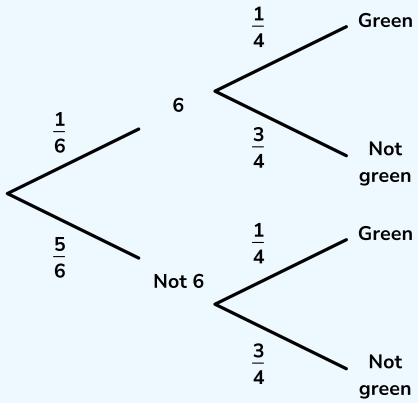
Question	Working	Answer	Notes
Q13a			B1 Correct line drawn
Q13b			M1 A reflection of the shape A in a vertical line of reflection A1 Fully correct reflection
Q13c		Enlargement Scale factor 3 Centre (0, 0)	B1 Any two conditions seen B1 All three conditions correct

Question	Working	Answer	Notes
Q14a		170g	M1 Evidence of use of graph A1 170g 170g scores both marks
Q14b	7 pounds 8 ounces: $7 \times 16 + 8 = 120$ ounces $20 \times 170 = 3400$g	3400g	P1 Converting pounds and ounces to ounces or using their conversion from part a or another conversion found from the graph to convert 120 ounces to grams A1 3400g
Q15	$18 \times 8 \times 6 = 864$	864cm^3	M1 $18 \times 8 \times 6$ A1 864 B1 Correct units cm^3

Question	Working	Answer	Notes
Q16a			M1 A line that goes right 3 and up 1 drawn anywhere on the grid A1 Correct arrow indicating direction
Q16b	$2\begin{pmatrix}1\\3\end{pmatrix}+\begin{pmatrix}-1\\4\end{pmatrix}=\begin{pmatrix}2\\6\end{pmatrix}+\begin{pmatrix}-1\\4\end{pmatrix}=\begin{pmatrix}1\\10\end{pmatrix}$	$\begin{pmatrix}1\\10\end{pmatrix}$	M1 Correct vectors for a and b seen M1 Correctly multiplying the vector a by 2 A1 $\begin{pmatrix}1\\10\end{pmatrix}$
Q17	$\frac{32}{160}\times 360=72°$ $\frac{48}{160}\times 360=108°$ $\frac{40}{160}\times 360=90°$ $\frac{12}{160}\times 360=27°$ $\frac{28}{160}\times 360=63°$ 		M1 At least two of the angles correct - angles can be seen written or drawn on the pie chart M1 All five angles correct M1 All angles drawn on the pie chart correctly A1 Fully correct pie chart including labels

Question	Working	Answer	Notes
Q18	 Total under 40 : 120 + 30 = 150 Total over 40 : 80 + 120 = 200	150 : 200 3 : 4	M1 200 and 150 correctly placed M1 120 and 80 or 30 and 120 correctly placed M1 Frequency tree fully correct A1 150:200 oe
Q19a	180 - 90 - 64 = 26°	26°	A1 26°
Q19b	10.5 ÷ 7 = 1.5 12 × 1.5 = 18	18	M1 10.5 ÷ 7 = 1.5 A1 12 × 1.5 = 18
Q20	10 × 5.5 = 55 55 - 6 + 0 = 49 49 ÷ 10 = 4.9	4.9 years	P1 Calculating the total time for the 10 teachers to be 55 years P1 Subtracting 6 and adding 0 and dividing by 10 A1 4.9
Q21a		$6.21\ 10^{5}$	B1 6.2110^{x} where x is a positive integer B1 6.2110^{5}
Q21b		0.00173	B1 cao

Question	Working	Answer	Notes
Q21c	$820000 + 39000 = 859000$	8.59×10^5	M1 Attempt to convert both numbers to ordinary numbers and add them or to change one number so that the powers of 10 are equal E.g. $(8.2 \times 10^5) + (0.39 \times 10^5)$ A1 8.59×10^5 must be in standard form
Q22	$T = \frac{40M - N^2}{3}$ $3T = 40M - N^2$ $3T + N^2 = 40M$ $\frac{3T + N^2}{40} = M$	$M = \frac{3T + N^2}{40}$	M1 Reaching $3T + N^2 = 40M$ A1 $M = \frac{3T + N^2}{40}$
Q23	Large: $\pi \times 3^2 \times 11 = 311.0\text{cm}^3$ Small: $\pi \times 2^2 \times 8 = 100.5\text{cm}^3$ $2 \times 100.5 = 201\text{cm}^3$	1 large	P1 Finding the volume of the large can P1 Finding the volume of the small can and doubling C1 Correct conclusion based on correct working

Question	Working	Answer	Notes
Q24a			A1 $\frac{5}{6}$ or $\frac{3}{4}$ correctly placed A1 Fully correct
Q24b		$\frac{1}{6}$	A1 cao
Q24c	$P(\text{win £5}) = \frac{1}{6} \times \frac{1}{4} = \frac{1}{24}$	1:23	P1 Finding the probability of winning £5 P1 Working out the 23 people don't win: 23 or $\frac{23}{24}$ seen A1 1:23
Q25a	$4800 \times 1000 = 4800000\text{cm}^3$	4800000cm^3	M1 4800×1000 A1 4800000cm^3
Q25b	$4800000 \times 100^3 = 4.8$	4.8m^3	M1 1m = 100cm seen or implied or attempting to divide by 100 three times or to divide by 100^3 A1 4.8m^3
Q25c	$4.8 \times £1.58 = £7.58$	£7.58	A1 cao

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