



Mathematics

Paper 1

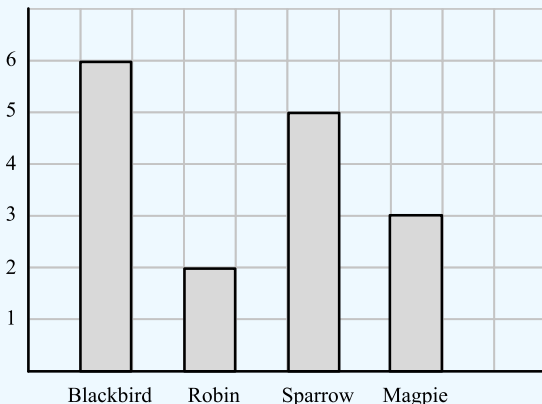
(Non-Calculator)

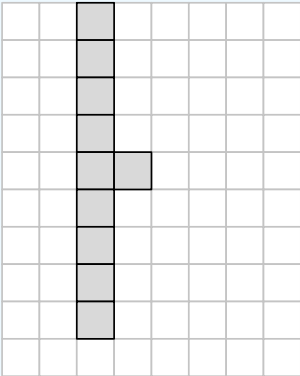
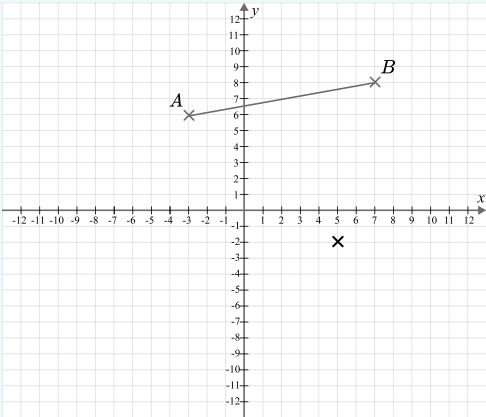
Foundation Tier

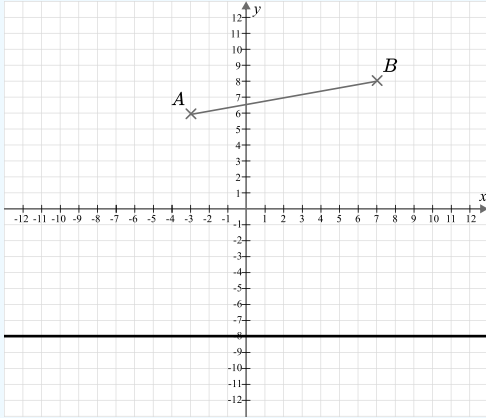
Mark Scheme

Edexcel GCSE

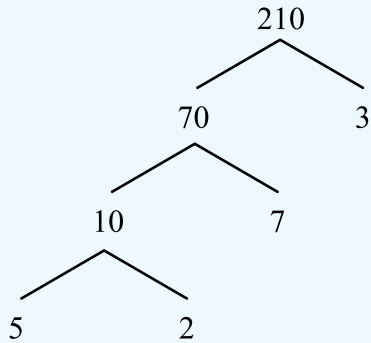
SET 5

Question	Working	Answer	Notes															
Q1		5																
Q2		301																
Q3		24																
Q4		35cm																
Q5		32°																
Q6	$£68 + £110 + £35 = £213$ $£300 - £213 = £87$	£87	M1 $£68 + £110 + £35 = £213$ M1 $£300 - \text{their } £213$ A1 cao															
Q7a	<table><thead><tr><th>Bird</th><th>Tally</th><th>Frequency</th></tr></thead><tbody><tr><td>Blackbird</td><td> I</td><td>6</td></tr><tr><td>Robin</td><td> </td><td>2</td></tr><tr><td>Sparrow</td><td> </td><td>5</td></tr><tr><td>Magpie</td><td> </td><td>3</td></tr></tbody></table>	Bird	Tally	Frequency	Blackbird	I	6	Robin		2	Sparrow		5	Magpie		3		B1 At least 3 rows correct B1 Fully correct
Bird	Tally	Frequency																
Blackbird	I	6																
Robin		2																
Sparrow		5																
Magpie		3																
Q7b			M1 Labelling bird names on horizontal axis OR a linear scale on the vertical axis M1 At least 2 bars correct ft their frequency table A1 ft their frequencies or tallies in (a).															

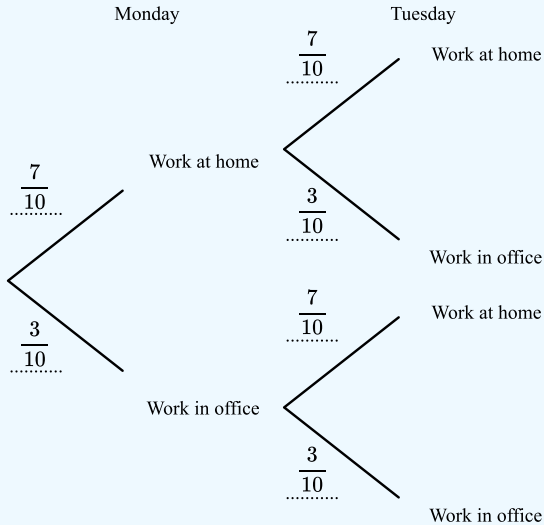
Question	Working	Answer	Notes
Q8a		$n = 9$	
Q8b		$p = 55$	
Q9	$30 - 16 = 14$ $16 : 14$	$8 : 7$	M1 $16 : 14$ A1 cao
Q10a			
Q10b		10, 12	
Q11a		$(-3, 6)$	
Q11b			

Question	Working	Answer	Notes
Q11c		(2, 7)	
Q11d			
Q12a	$\frac{9}{15} + \frac{2}{15} = \frac{11}{15}$	$\frac{11}{15}$	M1 Correct use of a common denominator A1 $\frac{11}{15}$ oe
Q12b	$\frac{4 \times 3}{5 \times 8} = \frac{12}{40} = \frac{3}{10}$	$\frac{3}{10}$	M1 $\frac{4 \times 3}{5 \times 8} = \frac{12}{40}$ A1 Correct, simplified fraction
Q13	$\begin{aligned} p &= 3 \times 5 - 2 \times 12 \\ &= 15 - 24 \\ &= -9 \end{aligned}$	-9	M1 Substitutes 5 and 12 into the expression A1 cao
Q14	$\begin{aligned} 83 \times 2.92 &\approx 80 \times 3 \\ &= 240 \end{aligned}$	240	M1 Rounds at least one value to 1sf A1 cao

Question	Working	Answer	Notes
Q15	Perimeter of rectangle $= 10 + 10 + 4 + 4 = 28$ Perimeter of triangle = 14 $14 - 3 = 11$ $11 \div 2 = 5.5$	$x = 5.5$	M1 Perimeter of rectangle = 28 M1 Perimeter of triangle = 14 M1 $14 - 3 = 11$ A1 $(x =) 5.5$ or $\frac{11}{2}$ oe
Q16	12 cupcakes = 100g sugar 6 cupcakes = 50g 30 cupcakes = $100 + 100 + 50 = 250$ g sugar	250g	M1 Correct first step e.g. amount of sugar for 6 or 24 cupcakes A1 cao
Q17a	$2 \times 2 \times 2 \times 2 = 16$	16	
Q17b		1	
Q18a		$10y - 15$	
Q18b	$12x - 28 - 2x + 10$ $= 10x - 18$	$10x - 18$	M1 Both brackets correctly expanded A1 cao
Q18c		$x(x - 7)$	
Q19	Profit = $\pounds 96 - \pounds 80 = \pounds 16$ $\frac{16}{80} \times 100 = \frac{2}{10} \times 100 = 20\%$ Or $8 = 10\%$ so $16 = 20\%$	20%	M1 $\pounds 16$ profit M1 $\frac{16}{80} \times 100$ A1 cao

Question	Working	Answer	Notes
Q20		Translation $\begin{pmatrix} -6 \\ 1 \end{pmatrix}$	M1 Translation 6 left and 1 up or given as a vector
Q21a	 <pre> graph TD 210 --- 70 210 --- 3 70 --- 10 70 --- 7 10 --- 5 10 --- 2 </pre>	$2 \times 3 \times 5 \times 7$	M1 Correct prime factors identified A1 cao
Q21b	$90 = 2 \times 3 \times 3 \times 5$ $210 = 2 \times 3 \times 5 \times 7$ $HCF = 2 \times 3 \times 5 = 30$	30	M1 Compares prime factors of 90 and 210 or attempts to list the factors of 90 and 210 A1 cao
Q22a		5, 7, 8, 9, 10, 11	
Q22b	$n(A \cap B) = 3$ $n(\xi) = 12$ $\frac{3}{12} = \frac{1}{4}$	$\frac{3}{12}$	M1 $n(A \cap B) = 3$ seen or implied A1 $\frac{3}{12}$ oe

Question	Working	Answer	Notes
Q23	$\frac{11}{20}$ of 180 = 99 $L : R = 3 : 2 = 15 : 10$ $R : T = 5 : 4 = 10 : 8$ $L : R : T = 15 : 10 : 8$ $99 \div 33 = 3$ $15 \times 3 = 45$	45	M1 $\frac{11}{20}$ of 180 = 99 M1 Multiplies ratios to make R parts the same M1 Their “99” divided by their “33” A1 cao
Q24	$g = 3f - 4$ $g + 4 = 3f$ $\frac{g + 4}{3} = f$	$f = \frac{g + 4}{3}$	M1 $g + 4 = 3f$ or $\frac{g}{3} = f - \frac{4}{3}$ A1 cao
Q25	$144 \div 12 = 12$ Area of base = 12cm^2 Pressure = $\frac{96}{12} = 8\text{N/cm}^2$	8 N/cm^2	M1 $144 \div 12 = 12$ M1 Pressure = $\frac{96}{12}$ A1 cao
Q26	$3.15 \times 10^4 = 31500$ $3.15 \times 10^{-2} = 0.0315$ $3.15 \times 10^{-1} = 0.315$ 3150 0.0315, 0.315, 3150, 31500	3.15×10^{-2} , 3.15×10^{-1} , 3150, 3.15×10^4	M1 Correctly converts at least two values from standard form or converts $3150 = 3.15 \times 10^3$ A1 cao

Question	Working	Answer	Notes
Q27	$360 = 60\%$ $60 = 10\%$ $600 = 100\%$	£600	M1 $360 = 60\%$ seen or implied A1 cao
Q28	Pentagon: $\frac{3 \times 180}{5} = 108$ Triangle: $\frac{180}{3} = 60$ $108 + 60 + 60 = 228$ $360 - 228 = 132$		M1 Interior angle of pentagon = 108 M1 $108 + 108 + 60 = 228$ A1 Full solution with no errors
Q29a	$p \times p = \frac{49}{100}$ $p = \sqrt{\frac{49}{100}} = \frac{7}{10}$ <p>Monday</p> <p>Tuesday</p> 		M1 $p = \sqrt{\frac{49}{100}} = \frac{7}{10}$ M1 $P(\text{work in office}) = \frac{3}{10}$ A1 Correctly completed tree diagram


Question	Working	Answer	Notes
Q29b	$\frac{3}{10} \times \frac{3}{10} \times \frac{3}{10} = \frac{27}{1000}$	$\frac{27}{1000}$	M1 <i>ft</i> Their $\frac{3}{10} \times \frac{3}{10} \times \frac{3}{10}$ M1 $\frac{3}{10} \times \frac{3}{10} \times \frac{3}{10}$ A1 cao
Q30		$\frac{\sqrt{3}}{2}$	
Q31	$\frac{5^5 \times 5^{-2}}{5} = \frac{5^3}{5} = 5^2 = 25$	25	M1 Numerator simplified to 5^3 A1 cao

Looking to improve your school's maths results without stretching your budget?

Tutoring from our spoken AI maths tutor Skye gives schools an even more affordable option for every pupil.

- ✓ 90% cheaper than other tutoring providers
- ✓ Curriculum-aligned lessons designed by qualified teachers
- ✓ Discounts available for long-term bookings and MATs

 thirdspacelearning.com

 0203 771 0095

 hello@thirdspacelearning.com

Where to go next?

For more GCSE maths revision resources and worksheets, visit the Third Space Learning [GCSE maths revision](#) pages. Or scan the QR code to discover our library of FREE GCSE maths revision resources:

