



THIRD SPACE  
LEARNING

# Mathematics

## Paper 1

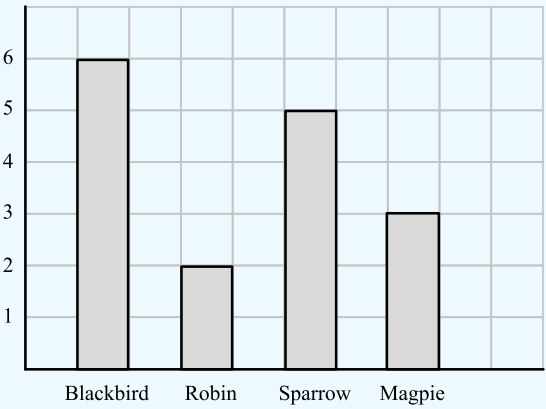
### (Non-Calculator)

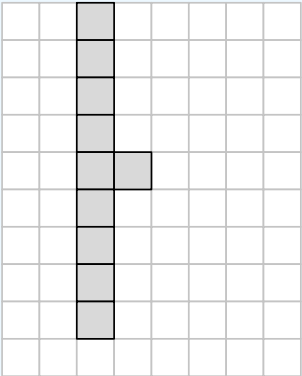
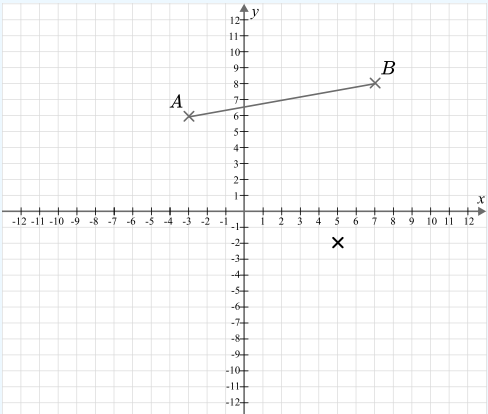
### Foundation Tier

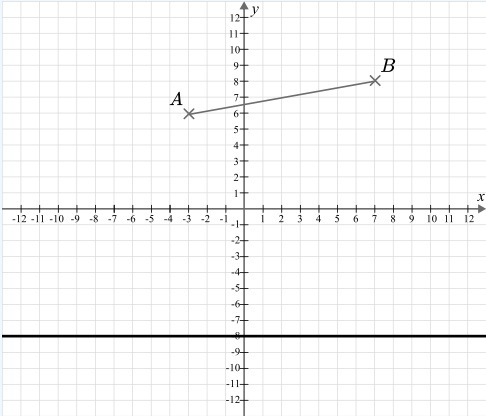
### Mark Scheme

Edexcel GCSE

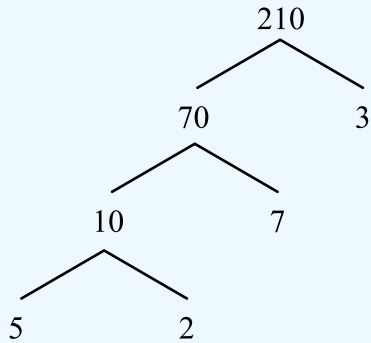
SET 5

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 border="1"> <thead> <tr> <th>Bird</th> <th>Tally</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Blackbird</td> <td>      </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		6	Robin		2	Sparrow		5	Magpie		3		B1 At least 3 rows correct B1 Fully correct
Bird	Tally	Frequency																
Blackbird		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).															

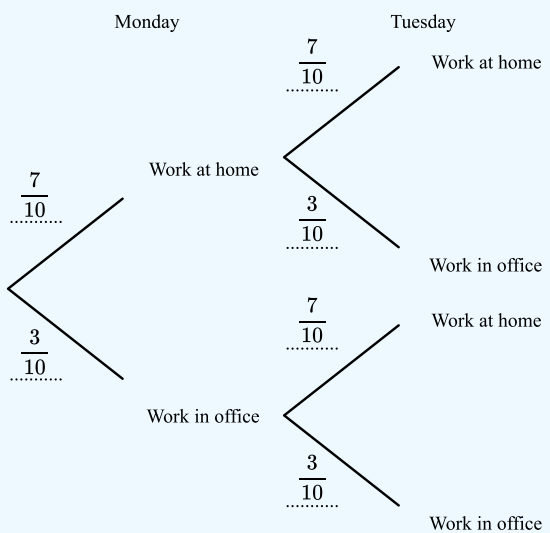
Question	Working	Answer	Notes
Q8a		$n = 9$	
Q8b		$p = 55$	
Q9	$30 - 16 = 14$ $16 : 14$	$8 : 7$	M1 $16 : 14$ A1 cao
Q10a			
Q10b		10, 12	
Q11a		$(-3, 6)$	
Q11b			

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
<b>Q15</b>	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
<b>Q16</b>	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
<b>Q17a</b>	$2 \times 2 \times 2 \times 2 = 16$	16	
<b>Q17b</b>		1	
<b>Q18a</b>		$10y - 15$	
<b>Q18b</b>	$12x - 28 - 2x + 10$ $= 10x - 18$	$10x - 18$	M1 Both brackets correctly expanded A1 cao
<b>Q18c</b>		$x(x - 7)$	
<b>Q19</b>	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		$2 \times 3 \times 5 \times 7$	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 = $12\text{cm}^2$ Pressure = $\frac{96}{12} = 8\text{N/cm}^2$	$8\text{ N/cm}^2$	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	$3.15 \times 10^{-2}, 3.15 \times 10^{-1}, 3150, 3.15 \times 10^4$	M1 Correctly converts at least two values from standard form <b>or</b> converts $3150 = 3.15 \times 10^3$ A1 cao

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


Question	Working	Answer	Notes
<b>Q29b</b>	$P(\text{office, home}): \frac{3}{10} \times \frac{7}{10} = \frac{21}{100}$ $P(\text{home, office}): \frac{7}{10} \times \frac{3}{10} = \frac{21}{100}$ $\frac{21}{100} + \frac{21}{100} = \frac{42}{100}$	$\frac{42}{100}$ oe	M1 for a correct probability for one day (e.g. “ $\frac{3}{10}$ ” × “ $\frac{7}{10}$ ” or “ $\frac{7}{10}$ ” “ $\frac{3}{10}$ ”) ft their value for p in pt (a) M1 ft their “ $\frac{21}{100}$ ” × 2
<b>Q30</b>		$\frac{\sqrt{3}}{2}$	
<b>Q31</b>	$\frac{5^5 \times 5^{-2}}{5} = \frac{5^3}{5} = 5^2 = 25$	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](https://thirdspacelearning.com)

 0203 771 0095

 [hello@thirdspacelearning.com](mailto: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:

