

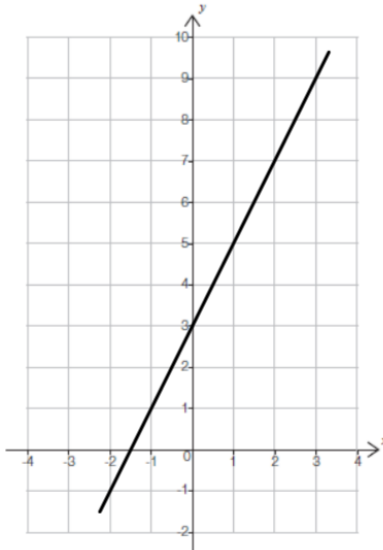
Year 8 Autumn Foundation Paper A

Question	Answer	Marks	Notes and guidance
1	Point plotted at (4, 3)	1	
	(0, 5)	1	
2	40	1	
3	$\frac{2}{3}$	1	Accept any equivalent form
	$\frac{1}{9}$	1	Accept any equivalent form
4	3 : 1	1	
	3 : 5 : 4	1	
	21	1	
5	42 (m)	1	Allow just 42, but do not allow 42 cm
	6 (cm)	1	Allow just 6, but do not allow 6 m
6	(5, 10)	1	
	(-3, -6)	1	
7	Adam £7	2	Allow 1 mark for £7 seen as one 'share'
	Zak £28		

Year 8 Autumn Foundation Paper A

8	Calculation completed correctly i.e. $4 \times \frac{2}{3} = \frac{8}{3} = 2\frac{2}{3}$	1																
	$2\frac{1}{4}$	2	Award 1 mark for $\frac{9}{4}$															
	12	1																
	6	1																
9	Completes table correctly <table border="1" data-bbox="385 549 1070 823"> <thead> <tr> <th>Shoe size</th> <th>Tally</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>5</td> <td> </td> <td>5</td> </tr> <tr> <td>6</td> <td></td> <td>0</td> </tr> <tr> <td>7</td> <td> </td> <td>4</td> </tr> <tr> <td>8</td> <td> </td> <td>3</td> </tr> </tbody> </table>	Shoe size	Tally	Frequency	5		5	6		0	7		4	8		3	2	Award 1 mark for 2 or 3 correct values OR all tallies correct but frequency column not completed
	Shoe size	Tally	Frequency															
5		5																
6		0																
7		4																
8		3																
10	$\frac{2}{9}$	1	Allow any equivalent form															
	$\frac{2}{3}$	1	Allow any equivalent form															
	2 : 1	1	Correct answer only, must be simplified															
11	12	1																
	5	1																
12	24	1																
	7	1																
13	80	1																
	Accept anywhere between 44 and 45 inclusive	1																

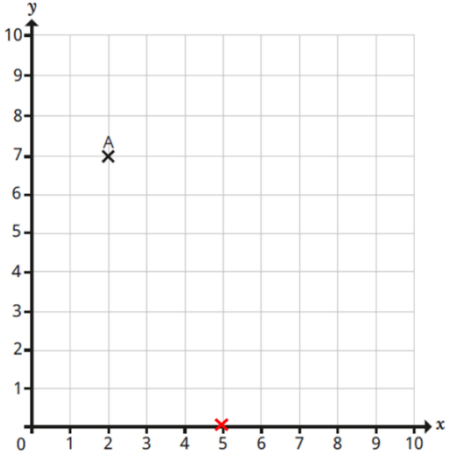
Year 8 Autumn Foundation Paper A

14	Completes table correctly i.e.	2	Award 1 mark for 2 or 3 values correct																
	<table border="1"> <thead> <tr> <th></th> <th>Walk</th> <th>Bus</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Boys</td> <td>27</td> <td>19</td> <td>46</td> </tr> <tr> <td>Girls</td> <td>13</td> <td>41</td> <td>54</td> </tr> <tr> <td>Total</td> <td>40</td> <td>60</td> <td>100</td> </tr> </tbody> </table>		Walk	Bus	Total	Boys	27	19	46	Girls	13	41	54	Total	40	60	100		
		Walk	Bus	Total															
Boys	27	19	46																
Girls	13	41	54																
Total	40	60	100																
$\frac{27}{50}$ or equivalent	1	e.g. 54%, $\frac{54}{100}$, 0.54																	
$\frac{13}{54}$																			
15	Completes table correctly: -1, 3, 5 and 9	2	Award 1 mark for 2 or 3 values correct																
	Draws correct graph 	2	Award 1 mark for plotting all their co-ordinates correctly																

Year 8 Autumn Foundation Paper A

16	1, 3 and 9	1	In any order
	$\frac{3}{8}$	1	Accept any equivalent form e.g. 0.375, 37.5% Follow through from their set B – e.g. if only members listed, award mark for $\frac{2}{8}$ or any equivalent form

Year 8 Autumn Foundation Paper Mark Scheme B

Question	Answer	Marks	Notes and guidance
1	£4	1	
	£20	1	
2	2 : 3	2	Award 1 mark for 6 : 9 seen
3	(2, 7)	1	
	(5, 0) correctly plotted 	1	Allow slight inaccuracy if intention is clear.
4	60	1	
	15	1	
5	20	1	
	20	1	
	15	1	

Year 8 Autumn Foundation Paper Mark Scheme B

6	9	1	
	Positive	1	
	Line of best fit drawn correctly	1	Any reasonable line
	Correct value from their line	2	Award both marks for correct reading from their line even if working not seen. Award 1 mark for drawing horizontal line from 10 g to their line
7	$\frac{4}{5}$	1	
	$1\frac{2}{5}$	2	1 mark for $\frac{7}{5}$ or drawing three additional fifths on the diagram
	10	1	
8	Red	1	
	$\frac{3}{8}$	2	Award 1 mark $\frac{15}{40}$ or any equivalent fraction, decimal or percentage
9	Table fully completed with B1, B2, C1, C2, D1, D2, E1 and E2	2	Award 1 mark for at least five correct entries
10	$\frac{1}{12}$	1	Accept any equivalent fraction
	$\frac{6}{35}$	1	Accept any equivalent fraction
	$\frac{1}{2}$	1	Accept any equivalent fraction

Year 8 Autumn Foundation Paper Mark Scheme B

11	$\frac{1}{5}$	1															
	1 : 4	1															
	$\frac{4}{7}$	2	Award 1 mark for fraction with denominator 7 or rectangle drawn of 4 shaded and 3 unshaded sections														
12	<table border="1" style="display: inline-table; vertical-align: middle;"> <tbody> <tr> <td style="background-color: #cccccc;">x</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td style="background-color: #cccccc;">y</td> <td>0</td> <td>1</td> <td style="color: red;">2</td> <td>3</td> <td style="color: red;">4</td> <td>5</td> </tr> </tbody> </table>	x	-2	-1	0	1	2	3	y	0	1	2	3	4	5	1	
	x	-2	-1	0	1	2	3										
y	0	1	2	3	4	5											
	Straight line drawn from (-2, 0) to (3, 5)	2	Award 1 mark for at least four or their values correctly plotted														
13	390	2	Award 1 mark for attempt to divide 36 by 12 and multiply the result by 130														
	165	2	Award 1 mark for any complete method e.g. attempt to halve 110 and add result to 110, or 110×1.5 etc.														
14	Any one of (1, 11), (2, 6), (2, 8), (3, 9), (3, 10), (5,3), (5, 5), (6, 6), (6, 8), (7, 3), (7, 8), (9, 7)	1	(3, 9) and (5, 5) are the most obvious. Any points in the lines $y = 6.5 - 0.5x$ or $y = 11.5 - 0.5x$ (excluding A and B) are also possible Ignore extras if correct – mark only the answer in the answer box unless otherwise indicated.														

Year 8 Spring Foundation Paper



Question	Answer	Marks	Notes and guidance
1	Indicates 20%	1	Allow slight error provided intention is clear
	£6	2	Award 1 mark for fully correct method to find 20%
2	4	1	
	8	1	
	$10x + 5$	1	
3	Plots both points correctly	2	Award 1 mark for each correct point
	Indicates (-3, -3) and (3,3) and no extras	1	Accept any clear indication – circled, underlined, ticked etc.
4	Writes 7 in final column Draws 10 dots in correct pattern in first column	2	1 mark for each
	19	1	
5	£16.10	3	Award 1 mark for attempt to multiply 84p by 3 and add the result to £1.38 with consistent units Award 1 mark for attempt to subtract their total from £20
	£24 or 2400p	2	Accept £24.00, but not £24.0 Award 1 mark for clear attempt at 30×80 p or equivalent
6	$y > 8$	1	Must have correct inequality signs, not = If neither mark earned, award 1 mark for both 8 and 12 seen regardless of signs.
	$x < 12$	1	

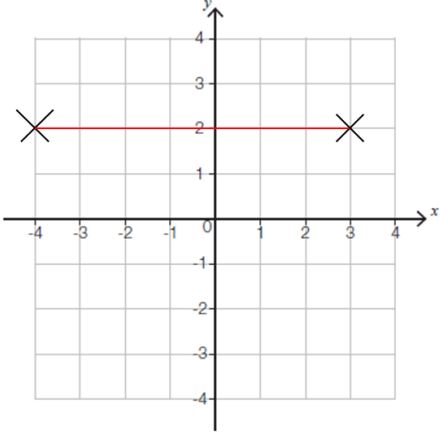
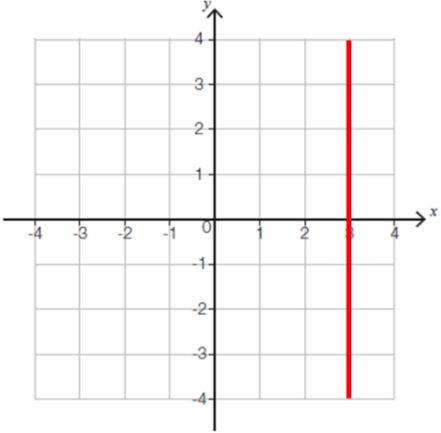
Year 8 Spring Foundation Paper

7	$a \times a \times a$ $3a - 12$ $a + 8$	3	1 mark each
8	$\frac{78}{78}$	2	1 mark each Follow through their answer $\frac{x}{50}$ for second mark
9	2.9 m or 290 cm	2	Award 1 mark for correct method to find perimeter
10	1 : 5	2	Award 1 mark for 2 kg = 2000 g seen or implied
11	Chooses 12 increased by $\frac{1}{3}$ with justification e.g. $\frac{1}{3}$ of 12 = 4, 25% of 12 = 3	2	Award 1 mark for at least one correct relevant calculation
	91	2	Award 1 mark for complete correct method with one arithmetical error
	$\frac{15}{28}$	1	Accept equivalent fractions
12	18	1	
	Gives reason e.g. <ul style="list-style-type: none"> The top marks could both be 41 (or 42 etc.) We only know the top mark is between 41 and 50 (condone 40) 	1	
	$\frac{2}{29}$	1	

Year 8 Spring Foundation Paper

13	6×10^5		
	7×10^{-3}		
	Indicates 6.2×10^5 Indicates 8×10^{-2}	 	1 mark for each. Accept any clear indication – circled, underlined, ticked etc.

Year 8 Spring Foundation Paper Mark Scheme

Question	Answer	Marks	Notes and guidance
		2	<p>Award 1 mark for each point correctly plotted</p> <p>Condone if line joining the points is not drawn</p>
1	e.g. $(-1, 2)$	1	Any point of the form $(a, 2)$, $a \neq -4$, $a \neq 3$
		1	

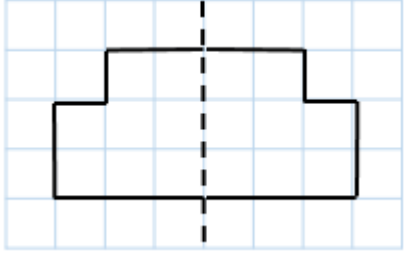
Year 8 Spring Foundation Paper Mark Scheme

2	£20		
	£4		
	£8		Follow through 2 × their answer to 10% of £40
3	$2x + 1$		
	$4x$		
4	Indicates 5×4 , $5 + 5 + 5 + 5$ and $(2 \times 5) + (2 \times 5)$		Award 1 mark for two correct or all three correct with 1 extra
5	$\frac{11}{25} = \frac{\boxed{44}}{100} = \boxed{44}\%$		
	14		
6	$4m + 12$		
	$y^2 - 7y$		
	4		
	$4(3x + 4)$		
7	18 and 27	2	Award 1 mark for attempt to divide 45 by (2 + 3)
8	a^3		
	b^{11}		
	$10x^2 + 5x$		
9	$\frac{2}{15}$		Allow any equivalent form
	$\frac{6}{7}$	2	Award 1 mark for $\frac{4}{7} \times \frac{3}{2}$ or $\frac{12}{14}$ seen
10	0.3		Allow any equivalent form

Year 8 Spring Foundation Paper Mark Scheme

11	No because she needs 5 more green beads	2	Accept any reasonable explanation Award 1 mark 50% of 60 = 30 seen or implied Do not accept 'No' with no supporting explanation.
12	$x > 7$	2	Award 1 mark for 7 or $x = 7$
	$x = -1$	2	Award 1 mark for correct first step seen e.g. $-5 = 5x$, $\frac{3}{5} = x + \frac{8}{5}$
13	£138	3	Award 1 mark for complete method to find 15% e.g. working out 10% and 5% and adding them Award 2 nd mark for £18 correctly found
14	32 cm	2	Award 1 mark for attempt to double both 3 and 5 OR perimeter of smaller rectangle shown as 16 cm
15	4×10^7	1	
	7×10^4	1	
	3 000 000	1	Allow 3,000,000 but do not allow commas placed incorrectly

Year 8 Summer Foundation Mark Scheme

Question	Answer	Marks	Notes and guidance
1	Draws both lines of symmetry on the rectangle, and no extras	2	Allow slight inaccuracy provided intention is clear. Award 1 mark either line with no extras of both lines and diagonal(s) also drawn
	Completes shape correctly i.e. 	2	Award 1 mark for error in one point only
2	$3x + 15$	1	
	10	2	Award 1 mark for correct first step e.g. $4x = 40$ or $x + 5 = 15$
	$y > 20$ or $20 < y$	2	Award 1 mark for correct first step e.g. $40 < 2y$ or $15 < y - 5$
3	30	1	
	15	1	
	Draws two and a half circles for Friday	1	

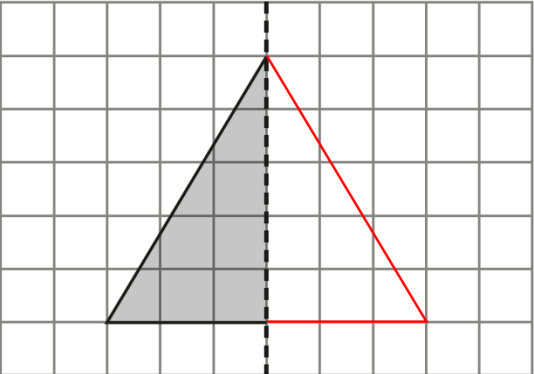
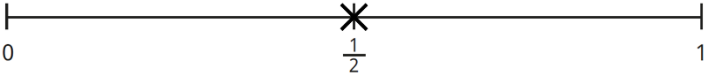
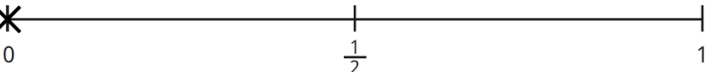
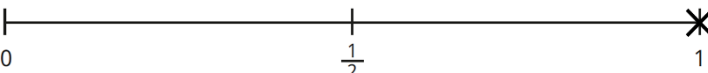
Year 8 Summer Foundation Mark Scheme

4	Puts cross at $\frac{1}{2}$ on probability scale	1	
	$\frac{1}{4}$ or equivalent	1	Allow e.g. 25%, 0.25, $\frac{2}{8}$ etc.
5	Completes table correctly 3 (6) 9 (4) 7 (11) 7 13 (20)	2	Award 1 mark for correct first step i.e. either 7 blue pencils or 9 pens in total
6	8	1	
	44	1	
7	3600	2	Award 1 mark for attempt at 60×60
	4500	2	Award 1 mark for rounding to 50×90 or 50×100
8	2	1	
	Draws bar of height 5 miles in correct place for Thursday	1	Ignore any shading
	4	1	
9	5	1	
	Isosceles	1	Ignore spelling slips if intention is clear
10	36	2	Award 1 mark for $\frac{1}{2} \times 12 \times 6$ or equivalent calculation seen
	47	1	
10	Indicates 100	1	

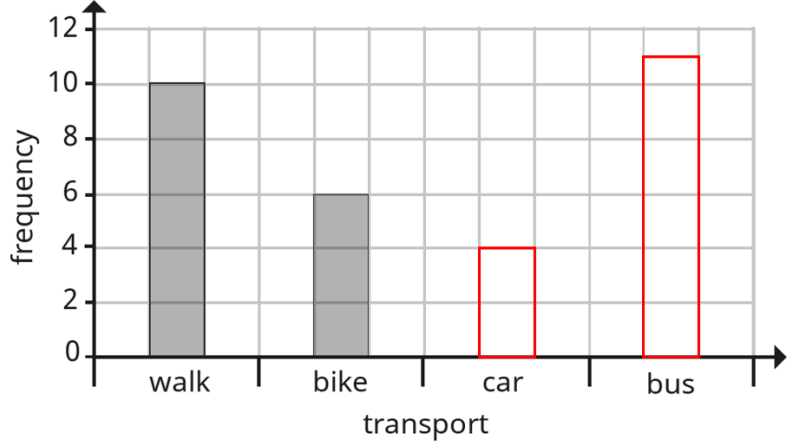
Year 8 Summer Foundation Mark Scheme

11	$\frac{1}{3}$	2	Award 1 mark for any correct equivalent fraction e.g. $\frac{15}{45}$, $\frac{3}{9}$ etc.
12	5 : 2	1	
	8 cm	2	Must include correct units for 2 marks. Award 1 mark for correct method e.g. sight of $20 \div 5 \times 2$ or just 8.
13	60	1	
	130	1	
	145	2	Award 1 mark for using either opposite angles of a parallelogram are equal or angles in a straight line add up to 180°

Year 8 Summer Foundation Paper Mark Scheme

Question	Answer	Marks	Notes and guidance
1		1	
2	15	2	Award 1 mark for correct method e.g. finding scale factor 5 e.g. $10 \div 2$
3		1	Allow slight inaccuracy so long as intention is clear
		1	
		1	

Year 8 Summer Foundation Paper Mark Scheme

4		2	Allow slight inaccuracy so long as intention is clear
	6	1	
	Bus	1	
	33	2	Award 1 mark for $10 + 6 + 4 + 11 + 2$ seen or implied.
5	36	1	
	8	1	
	14	2	Award 1 mark one correct evaluation seen i.e. $\sqrt{81} = 9$ or $\sqrt{25} = 5$
6	e.g. "Angles around a point must sum to 360° "	1	Accept "angles in a full turn" but do not accept "angles in a circle"
7	Jack £120 Annie £30	2	Award 1 mark for attempt to calculate $150 \div (4 + 1)$
8	$4a + 36$	2	Award 1 mark for correct expansion of at least one set of brackets or either term correct without wrong working

Year 8 Summer Foundation Paper Mark Scheme

9	$a = 36$	1													
	$b = \frac{2}{5}$	1	Accept any equivalent answer												
10	e.g. Boys' mean: $30 \div 6 = 5$ Girls' mean: $24 \div 4 = 6$ $6 > 5$ so girl's mean is higher	3	Award 1 mark for correct method to find at least one of the means Award 2 nd mark for both means found correctly Award 3 rd mark for correct conclusion clearly justified												
11	109	1													
	Alternate angles are equal	1	Do not accept just "alternate angles" or "Z angles are equal"												
12	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Fraction</th> <th>Decimal</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>$\frac{4}{10}$</td> <td>0.4</td> <td>40%</td> </tr> <tr> <td>$\frac{51}{100}$</td> <td>0.51</td> <td>51%</td> </tr> <tr> <td>$\frac{3}{100}$</td> <td>0.03</td> <td>3%</td> </tr> </tbody> </table>	Fraction	Decimal	Percentage	$\frac{4}{10}$	0.4	40%	$\frac{51}{100}$	0.51	51%	$\frac{3}{100}$	0.03	3%	3	Award 1 mark for 2 correct answers Award 2 marks for 3 correct answers
	Fraction	Decimal	Percentage												
	$\frac{4}{10}$	0.4	40%												
	$\frac{51}{100}$	0.51	51%												
$\frac{3}{100}$	0.03	3%													
13	$100\pi \text{ cm}^2$ or 314 cm^2	3	Award 1 mark for $\pi \times 10^2$ seen Award 2 nd marks for 100π or awrt 314 Award 1 mark for correct units stated												
14	> with working e.g. $\frac{1}{3} + \frac{1}{4} = \frac{7}{12}$ and $\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$ seen.	2	Award 1 mark for either fraction calculation completed correctly												
15	y^8	1													
	w^7	1													

Year 8 Summer Foundation Paper Mark Scheme

<p>16</p>		<p>2</p> <p>Award 1 mark for evidence of $x = 1$ used but image incorrectly placed OR correct reflection using $y = 1$ OR correct reflection in any line of the form $x = a$ for constant a</p>
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