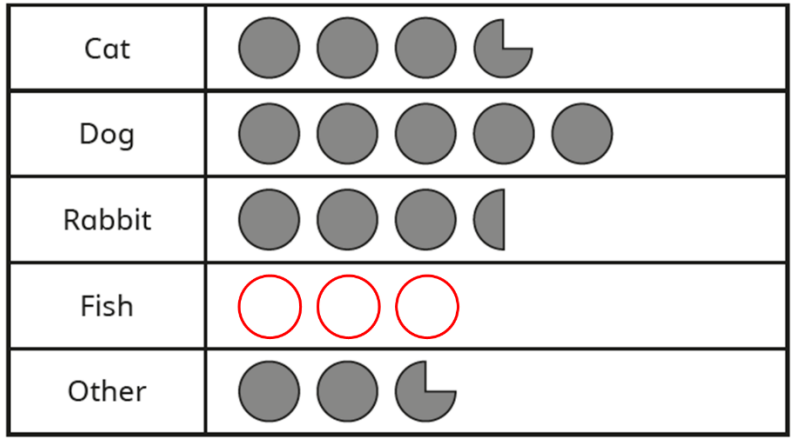
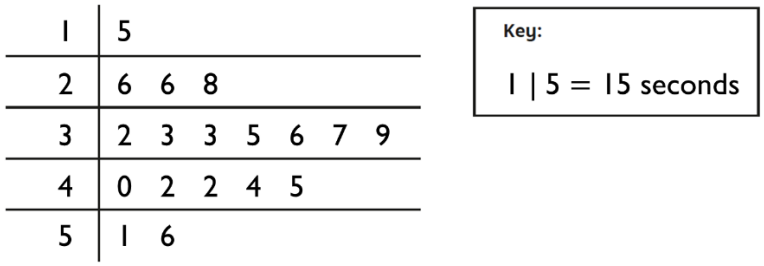
Year 11 Foundation Non-Calculator Paper 1 Mark Scheme

Question	Answer	Marks	Notes and guidance
1a	5567	1	
1b	$75 + 65$	1	Accept $65 + 75$
2		2	Award 1 mark for a correct method to find the number of fish owned seen or implied. e.g. $72 - (15 + 20 + 14 + 11)$
3a	a	1	Allow $1a$
3b	$35ab$	1	
4		3	Award 1 mark for a completed unordered stem and leaf diagram or one omission from an ordered diagram. Award 2 marks for a fully completed correctly ordered diagram. Award 1 mark for a correct key

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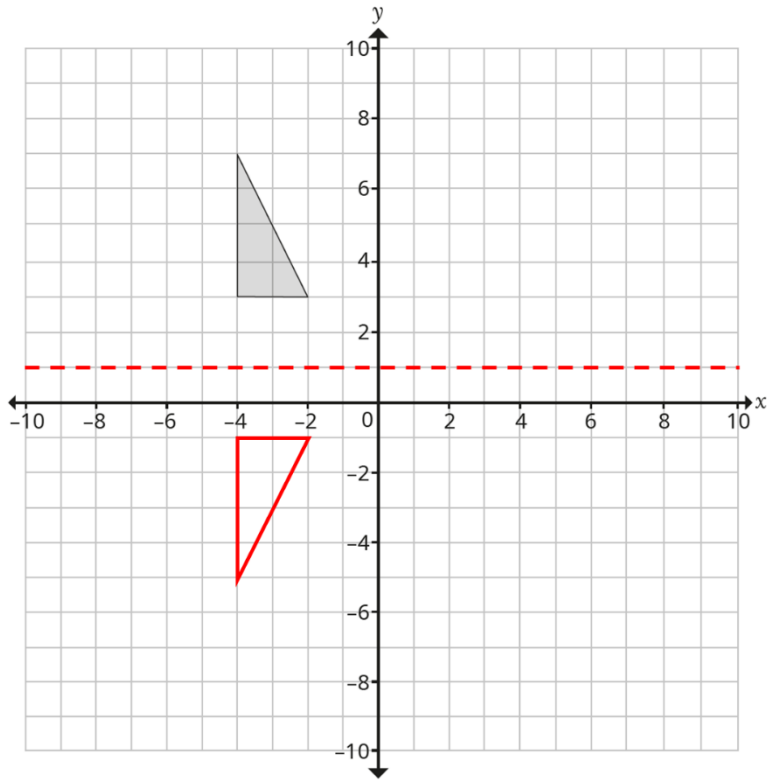
5a	e.g. $40 \times 9 = £360$	2	Award 1 mark for both values rounded to one significant figure use for an estimation Award 2nd mark for 360 seen Award 0 marks for an exact value of £383.03
5b	e.g. Underestimate as both values have been rounded down	1	Allow ft from their part a Award 0 marks for "underestimate" stated without correct justification
6		2	Award 1 mark for a correct reflection through $y = k$ where $k \neq 1$, or through $x = 1$

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7	$n > 2.5$	2	Award 1 mark for a correct first step to solve seen or implied e.g. $4n > 10$ Accept equivalent answers e.g. $n > \frac{5}{2}$
8	4	3	Award 1 mark for either 30% of 80 $(= 24)$ or $\frac{4}{7}$ of 35 $(= 20)$ correctly evaluated Award 2nd mark for both values evaluated
9	e.g. $2 \times 2 \times 2 \times 2 \times 3 \times 5$	2	Award 1 mark for a process to find prime factors of 240 i.e. a completed prime factor tree Accept equivalent answers
10a	£1500	2	Award 1 mark for 25×60 seen or implied
10b	20 months	2	Award 1 mark for $600 \div 30$ seen or implied
11	e.g. vertical axis has an inconsistent scale bars are not of equal width	2	Award 1 mark for each valid criticism
12a	4 3100	1	
12b	6.52×10^{-3}	1	
12c	3.2×10^{6}	2	Award 1 mark for a correct method seen or implied e.g. $(9.6 \div 3) \times (10^{4} \div 10^{-2})$ or $96000 \div 0.03$

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13	9.6 kg	3	Award 1 mark for a correct scaling seen or implied i.e. 100 leaflets = 1.6 kg Award 1 mark for a correct method seen to evaluate the mass of 600 kg e.g. "1.6" × 6 or "1.6" + 8
14a	4	1	
14b	270 cm^3 < 1000 cm^3	3	Award 1 mark for a correct method to find the volume of the cylinder seen or implied i.e. $3 \times 3^2 \times 10$ Award 1 mark for $270cm^3$ Award 1 mark for a correct comparison made against 1 litre

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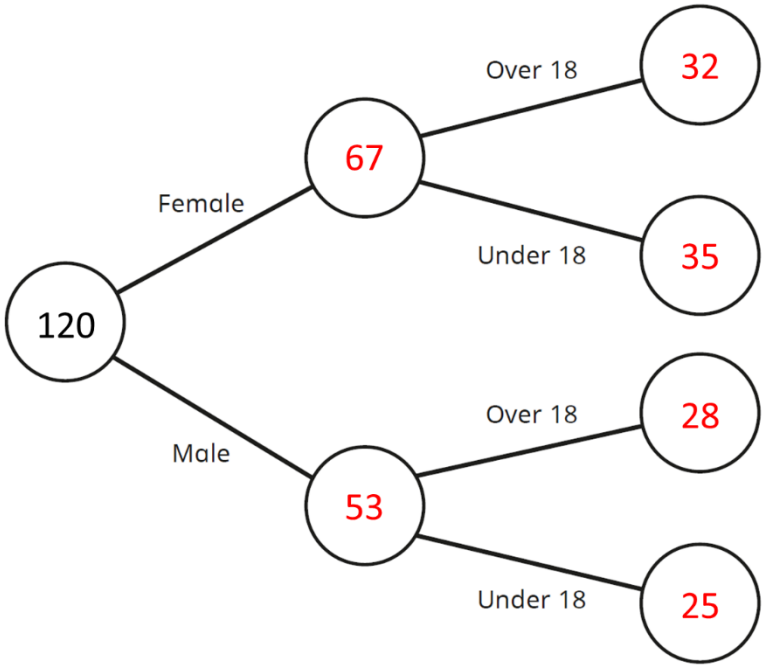
15		2	Award 1 mark for 67 females or 35 females under 18 identified
16a	e.g. $\boxed{-7} - \boxed{4} = -11$	1	Or $-4-7=-11$
16b	12	1	
17	0.85 km	1	
18a	5	2	Award 1 mark for $3\times7-2\times8$ seen or implied

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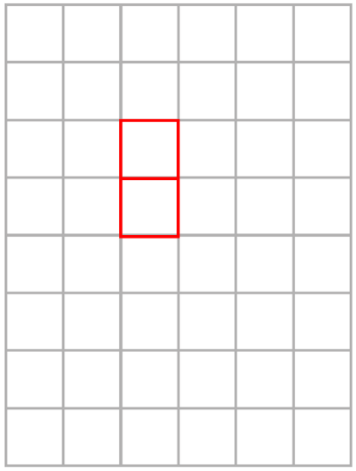
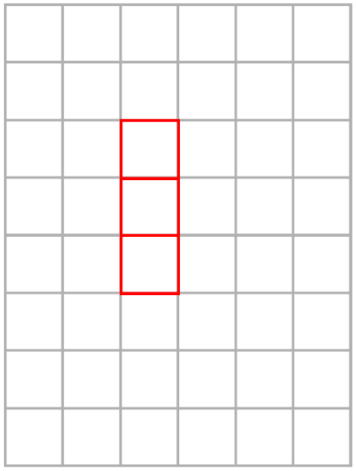
18b	32	2	Award 1 mark for $\frac{1}{2} \times 64$ seen or implied
19	1	1	
20	plan  side 	2	Award 1 mark for each correct drawing. Accept rotated form of plan but not side
21	£1648	2	Award 1 mark for any complete correct method e.g. attempt to find 3% and add on, or attempt at 1600×1.03
22	13	2	Award 1 mark for $780 \div 60$ seen or implied.
23	$\frac{3}{5}, \frac{612}{1000}, 0.62, 65\%, 0.8$	2	Award 1 mark converting all values to an equivalent form, or one item misplaced.
24	$4n - 10$	2	Award 1 mark for $4n + k$ where $k \neq -10$

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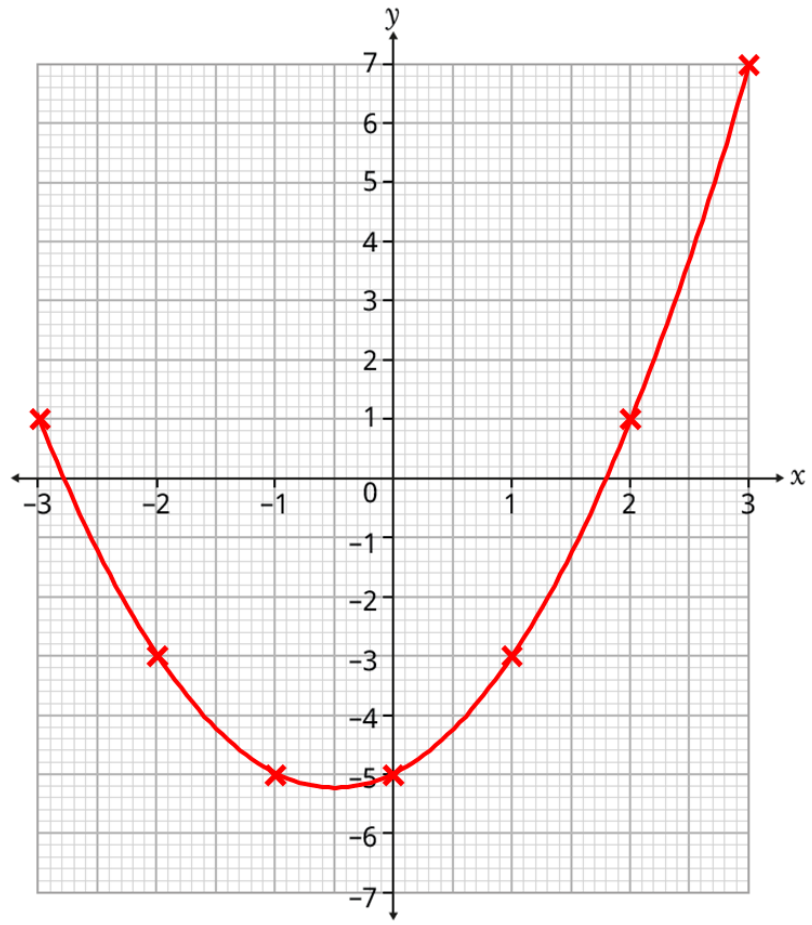
<table>
<tr><td>25a</td><td>$\frac{13}{40}$</td><td>2</td><td>Award 1 mark for writing each fraction as an equivalent with a common denominator i.e. $\frac{25}{40} - \frac{12}{40}$
Accept equivalent fractions not simplified as a final answer e.g. $\frac{26}{80}$</td></tr>
<tr><td>25b</td><td>$1\frac{2}{9}$</td><td>2</td><td>Award 1 mark for $\frac{11}{5} \times \frac{5}{9}$ seen or implied</td></tr>
<tr><td>26</td><td><table><tr><td>Colour</td><td>red</td><td>green</td><td>blue</td><td>yellow</td><td>purple</td></tr><tr><td>Probability</td><td>0.24</td><td>0.17</td><td>0.17</td><td>0.17</td><td>0.25</td></tr></table></td><td>2</td><td>Award 1 mark for method to find
P(G or B or Y) seen or implied e.g. 1 – 0.49</td></tr>
<tr><td>27a</td><td>1 : 2 : 6</td><td>2</td><td>Award 1 mark for forming an equivalent ratio not its simplest form e.g. 15 : 30 : 180</td></tr>
<tr><td>27b</td><td>£100</td><td>2</td><td>Award 1 mark for 450 ÷ their 9 seen or implied</td></tr>
<tr><td>28a</td><td><table><tr><td>x</td><td>−3</td><td>−2</td><td>−1</td><td>0</td><td>1</td><td>2</td><td>3</td></tr><tr><td>y</td><td>1</td><td>−3</td><td>−5</td><td>−5</td><td>−3</td><td>1</td><td>7</td></tr></table></td><td>2</td><td></td></tr>
</table>

28b		2	Award 1 mark for all points plotted from the table but not joined or all points from their table correctly plotted and joined.
29	90°	3	Award 1 mark for stating the total of the interior angles of a pentagon i.e. 540° Award 1 mark for a correct method to find the size of the other two angles e.g. $\frac{540-(115+120+125)}{2}$

30	Her speed is less than the speed limit	3	Award 1 mark for a correct method to calculate the speed of the journey e.g. 18×3 or $18 \div \frac{1}{3}$ Award 1 mark for 54 mph seen or implied Award final mark for a correct conclusion with working stated Award 0 marks for "less" with no or incorrect supporting working.
31	$x = -4$ or $x = 3$	2	Award 1 mark for a correct method to solve quadratic e.g. $(x + 4)(x - 3)$ seen. Allow one slip, but their attempt at factorisation must produce at least 2 correct terms when expanded.