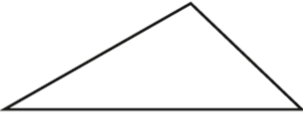
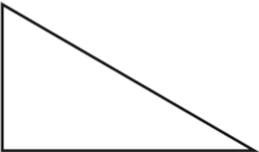
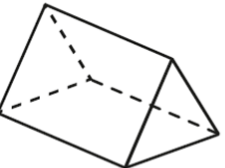
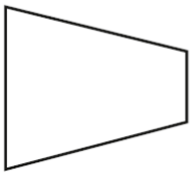
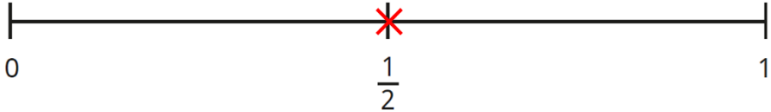
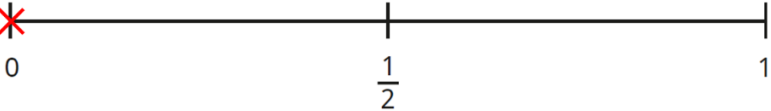


Year 11 Practice Paper 3F Calculator Mark Scheme

Question	Answer	Marks	Notes and guidance
1	<p>isosceles trapezium </p> <p>scalene triangle </p> <p>triangular prism </p> <p>right-angled triangle </p>	2	Award 1 mark for two correct pairings

Year 11 Practice Paper 3F Calculator Mark Scheme

2a	2.436688337	2	Award 1 mark for either numerator or denominator correctly evaluated
2b	2.44	1	Follow through from their answer to part a provided if has three or more decimal places
3a		1	Accept any clear indication on/above/below that line at $\frac{1}{2}$
3b		1	Accept any clear indication on/above/below that line at 0
4a	19	1	
4b	31	2	Award 1 mark for continuing sequence to find 5 th and 6 th term seen or implied
4c	e.g. the number of tiles in a pattern is always odd	1	Accept any correct explanation
5	$\frac{12}{21}, \frac{400}{700}, \frac{28}{49}$	2	Award 1 mark for finding two equivalent fractions
6a	2 and 16	2	Award 1 mark for two factors of 48 stated that do not have a difference of 14
6b	60	2	Award 1 mark for listing some multiples of 12 and 15
7a	$8x$	1	
7b	$g^2 + 5g$	2	Award 1 mark for g^2 or $5g$ stated

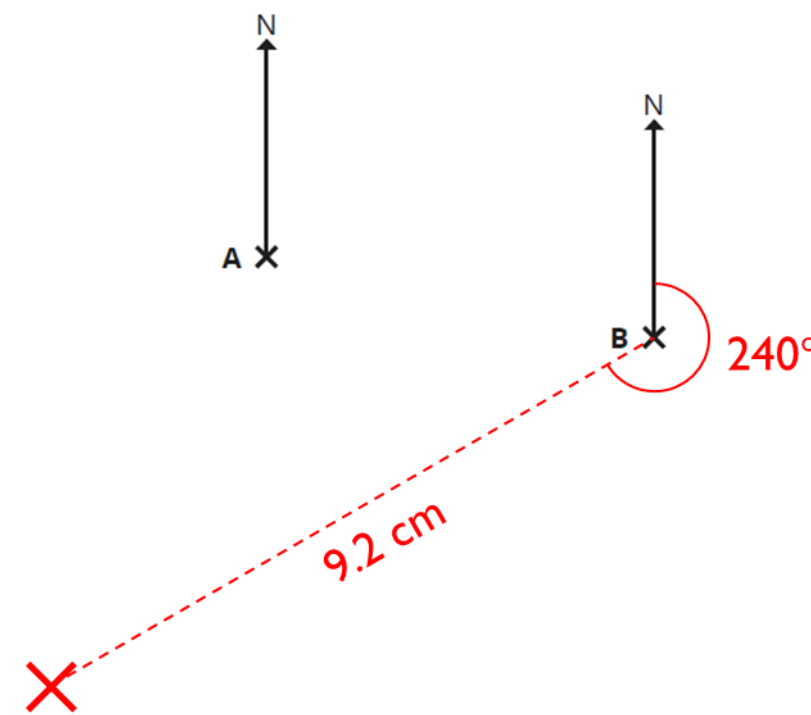
Year 11 Practice Paper 3F Calculator Mark Scheme

7c	$5x(y + 3)$	2	Award 1 mark for a correct partial factorisation or $5x$ identified as the highest common factor																
8	7	2	Award 1 mark for a correct first step to solve e.g. $\frac{1}{12}$ of 48 = 4 or $336 = \square \times 48$																
9a	<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td style="background-color: #e0e0e0;">×</td> <td style="background-color: #e0e0e0;">2</td> <td style="background-color: #e0e0e0;">3</td> <td style="background-color: #e0e0e0;">5</td> </tr> <tr> <td style="background-color: #e0e0e0;">3</td> <td style="color: red;">6</td> <td>9</td> <td>15</td> </tr> <tr> <td style="background-color: #e0e0e0;">4</td> <td style="color: red;">8</td> <td style="color: red;">12</td> <td>20</td> </tr> <tr> <td style="background-color: #e0e0e0;">5</td> <td style="color: red;">10</td> <td>15</td> <td style="color: red;">25</td> </tr> </tbody> </table>	×	2	3	5	3	6	9	15	4	8	12	20	5	10	15	25	1	
×	2	3	5																
3	6	9	15																
4	8	12	20																
5	10	15	25																
9b	$\frac{6}{9} = \frac{2}{3}$	2	Award 1 mark for correct method to find probability from their table																
10a	$\frac{27}{100}$	1																	
10b	65%	2	Award 1 mark for a correct method seen or implied e.g. $91 \div 140$ or $\frac{13}{20}$ or 0.65																
11	No, $929 < 1000$	2	Award 1 mark for $107\,800 \div 116 (= 929.3 \dots)$ seen or implied Award 0 marks for “No” with no or insufficient supporting working																
12a	36	1																	

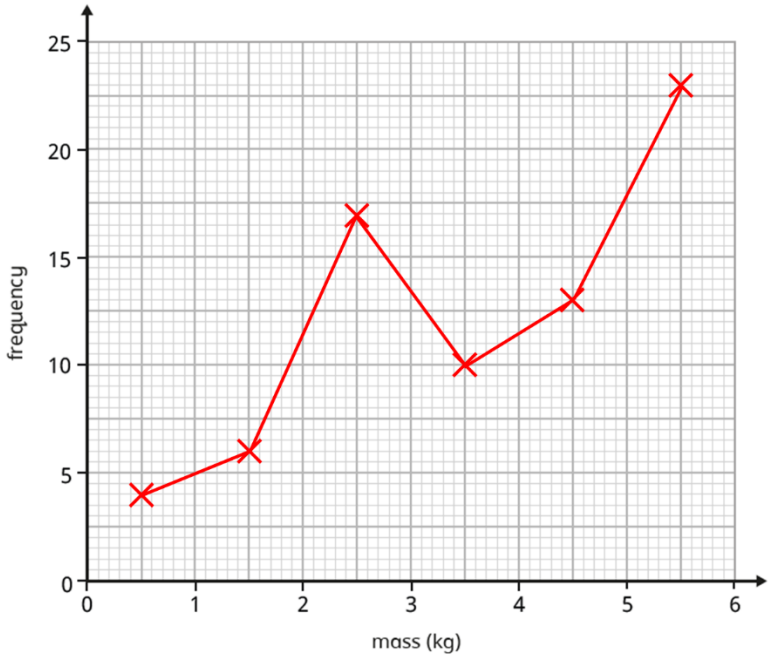
Year 11 Practice Paper 3F Calculator Mark Scheme

12b	31	1	
12c	e.g. the median score of class A was less than the median score of class B. Class A's scores were less varied than Class B	2	Award 1 mark for a comparison of the median scores for each class Award 1 mark for a comparison of the spread of data for each class
13	$\angle ACD = 41^\circ$ because <u>vertically opposite angles</u> are <u>equal</u> $\angle ADC = 78^\circ$ because <u>corresponding angles</u> in parallel lines are <u>equal</u> $x = 61^\circ$ because <u>angles in a triangle add up to 180</u>	4	Award 1 mark $\angle ACD = 41^\circ$ or $\angle ADC = 78^\circ$ stated (accept if indicated on their diagram) Award 1 mark for $x = 61^\circ$ Award 1 mark for one correctly stated reason provided to support working. Words underline (or their equivalent) must be stated. Award full marks for complete working with correct reasoning.
14	960 cm ²	3	Award 1 mark for a correct method to find the area seen or implied e.g. $\frac{1}{2} \times 24 \times 80$ Award 1 mark for 960 Award 1 mark for cm ²
15a	15	2	Award 1 mark for $10 - (-5)$ seen or implied
15b	23.75	2	Award 1 mark for $25 - (1.25)$ seen or implied
16	5 g	3	Award 1 mark for $600 \div 35$ seen or implied Award 1 mark for a correct method seen to find the mass left over e.g. $600 - (35 \times 17)$ Condone missing units

Year 11 Practice Paper 3F Calculator Mark Scheme

17a	2.85 km	1	Accept 2850 m
17b		2	Award 1 mark a bearing of 240° correctly drawn from B or an arc with radius 9.2 cm drawn from B
18a	$9p - 12$	1	Accept $3(3p - 4)$
18b	17 (cm)	2	Award 1 mark for forming and attempting to solve an equation in p e.g. $9p - 12 = 141$

Year 11 Practice Paper 3F Calculator Mark Scheme

19	£25.60	3	Award 1 mark for $96 \div 12 (= 8)$ Award 1 mark for “8” $\times 3.20$
20		2	Award 1 mark for points plotted at correct midpoints of intervals with no joining line segments OR correct frequency polygon with one error
21a	22 m/s	2	Award 1 mark for $330 \div 15$ seen or implied
21b	79.2 km/h	2	Award 1 mark for $22 \times \frac{3600}{1000}$ seen or implied. Follow through their answer to part a for 1 or 2 marks
22a	3 : 4	2	Award 1 mark for partial simplification of 18 : 24 e.g. 9 : 12 or 6 : 8

Year 11 Practice Paper 3F Calculator Mark Scheme

22b	$1 : 0.75$	1	
23a	£15 300	2	Award 1 mark for $18\ 000 \times 0.85$ or equivalent full method seen or implied Condone missing £
23b	£21 000	2	Award 1 mark for $17\ 850 \div 0.85$ or equivalent full method seen or implied Condone missing £
24	$h = 4$	3	Award 1 mark for a correct use of formula for area of a trapezium e.g. $\frac{1}{2}(13 + 7)h = 40$ Award 1 mark for correct first step to solve e.g. $(13 + 7)h = 40$
25	13.4 cm	3	Award 1 mark for a correct use of Pythagoras' theorem Award 1 mark for correct rearrangement e.g. e.g. $\sqrt{18^2 - 12^2}$ seen or implied Accept 13.41... etc.
26	$w = 3(q + 7)$	2	Award 1 mark for a correct first step to rearrange e.g. $q + 7 = \frac{w}{3}$ or $3q = w - 21$ Accept $w = 3q + 21$