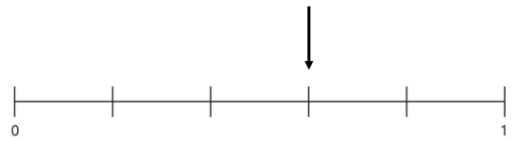
Edexcel Year 11 Paper 1F Nov 22 Non-Calculator Mark Scheme

Question	Answer	Marks	Notes and guidance
1	$\frac{3}{10}$	1	
2	103	1	
3	13	2	Award 1 mark for correct method to calculate. e.g. $19 - 6$
4	1, 2, 3, 4, 6, 12	2	Award 1 mark for at least four correct factors and no incorrect factors
5	81	2	Award 1 mark for correct method to calculate 3^4 e.g. $3 \times 3 \times 3 \times 3$
6	160	2	Award 1 mark for fully correct method to calculate y. e.g. $360 - (120 + 80)$
7		1	Accept any clear indication
8a	$\frac{7}{10}$	2	Award 1 mark for $\frac{14}{20}$ oe
8b	150	3	Award 1 mark for correct method to calculate $\frac{1}{5}$ of the total cards. e.g. $120 \div 4$ (= 30) Award 2nd mark for full correct method to calculate the total number of cards. e.g. 30×5

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9	28	2	Award 1 mark for fully correct method e.g. $\frac{7}{25} \times 100$ or 7×4
10a	3	1	
10b	2	1	
10c	$\frac{19}{40}$	2	Award 1 mark for attempt to find total number of Year 7 students and overall number of students
11	30	2	Award 1 mark for correct method to find $\frac{3}{4}$ of 40
12	Any value between 18.3 to 18.9	2	Award 1 mark for fully correct method to calculate the actual distance between B and C. e.g. 6.2×3
13	350	3	Award 1 mark for correct method to find one "part" e.g. $840 \div 12$ (= 70) Award 2nd mark for fully correct method to find Dexter's total. e.g. 70×5
14	500 ml (with fully correct workings)	3	Award 1 mark for correct method to find values that can be compared e.g. cost per ml, how many ml per p/£, cost of 1.5 litres for both etc. Award 2nd mark for two correct comparable values found Award 3rd mark for correct conclusion

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15a	$x \leq 2$	2	Award 1 mark for correct first step to solve. e.g. $2x \leq 4$ or $x - \frac{9}{2} \leq -\frac{5}{2}$
15b	$x = 7$	2	Award 1 mark for correct first step to solve. e.g. $x + 5 = 12$ or $2x + 10 = 24$
16	5 hours	3	Award 1 mark for correct method to find the cost without call-out charge. e.g. 120 – 45 (= 75) Award 2nd mark for fully correct method to find the total job time. e.g. 75 ÷ 5
17	350	2	Award 1 mark for fully correct method to find $\frac{7}{15}$ of 750
18a	$\frac{29}{60}$ oe	2	Award 1 mark for equivalent fractions with a common denominator.
18b	$\frac{30}{55}$ oe	2	Award 1 mark for attempt to multiply numerators and denominators
19	2	3	Award 1 mark for correctly equation to express perimeter. e.g. $2(a + 6) + 26 = 42$ Award 2nd mark for fully correct method to find a. e.g. (16 – 12) ÷ 2
20	e.g. $2 \times 2 \times 2 \times 2 \times 3$	2	Accept any correct form Award 1 mark for correct method to find prime factors of 48 e.g. factor tree with no more than one error

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21a	3 : 1	1	
21b	64	2	Award 1 mark for fully correct method to find the total number of counters. e.g. $32 \div (3 - 1) \times 4$
22	51.84	3	Award 1 mark for correct method to find the product Award 2nd mark for digits 5184 seen in product
23	45	3	Award 1 mark for correct method to find the constant of proportionality ($k = 4.5$) Award 2nd mark for fully correct method to find the value of y when $x = 10$ e.g. 10×4.5
24a	$8n^2$	1	
24b	$8n^{15}$	2	Award 1 mark for expression containing either 8 or n^{15}
25a	Reflection in the line $y = -1$	2	Award 1 mark for stating reflection in a different line. Award 0 marks for any answer containing combinations of transformations.

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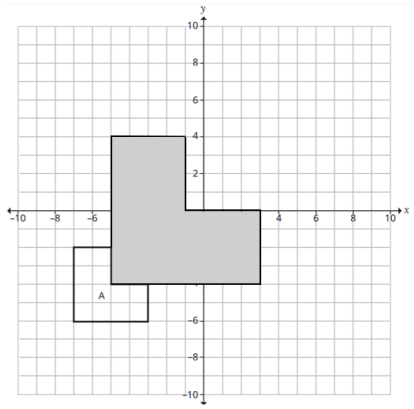
25b		2	Award 1 mark for enlargement of scale factor 2 anywhere else on the grid
26	72	3	Award 1 mark for correct method to find either height or length of a rectangle. e.g. $18 \div 3$ $(= 6)$ Award 2nd mark for correctly finding both dimensions of one rectangle
27	$(x - 3)(x - 5)$	2	Award 1 mark for factorisation that gives two out of three terms correct

28	No with fully correct supporting workings	5	Award 1 mark for calculating the area of the room. e.g. 3×5 (= 15) Award 2nd mark for correct first step to calculate cost. e.g. 15×18 (= 270) or $18 \div 10 \times 8$ (= 14.4) Award 3rd mark for fully correct method to calculate total cost. e.g. $270 \div 10 \times 8$ or 14.4×15 Award 4th mark for correct calculation of total cost = 216 (seen)
29	(8, −5)	2	Award 1 mark for either ordinate correct
30	1.5	2	Award 1 mark for fully correct method to find pressure. e.g. $180 \div 120$