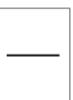


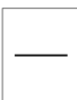
Guidance on the use of abbreviations within this mark scheme

M	method mark awarded for a correct method or partial method
P	process mark awarded for a correct process as part of a problem solving question
A	accuracy mark (awarded after a correct method or process; if no method or process is seen then full marks for the question are implied but see individual mark schemes for more details)
C	communication mark awarded for a fully correct statement(s) with no contradiction or ambiguity
B	unconditional accuracy mark (no method needed)
oe	or equivalent
cao	correct answer only
ft	follow through (when appropriate as per mark scheme)
sc	special case
dep	dependent (on a previous mark)
indep	independent
awrt	answer which rounds to
isw	ignore subsequent working

Question	Answer	Mark	Mark scheme	Additional guidance
1	9000	B1	cao	
2	12, 6, 4, -7, -8	B1	cao	
3	$\frac{75}{100}$	B1	$\frac{75}{100}$ oe e.g. $\frac{3}{4}$	
4	30	B1	cao	
5	35x	B1	cao	
6	$\frac{1}{2}$	M1 M1 A1	For number of banana flavoured sweets, e.g. $16 - 5 - 4 - 3 = 4$ OR $\frac{4}{16}$ oe for either banana or apple For $1 - \left(\frac{1}{4} + \frac{1}{4}\right) (= \frac{1}{2})$ OR for $\frac{4+4}{16}$ $\frac{1}{2}$ oe e.g. 0.5	
7	£1.80	M1 A1	For $150 \div 600 \times 7.20$ cao	
8	Diameter	B1	cao	Accept spelling mistakes
9	331	P1 P1 A1	For a start to the process e.g. $1250 + 300 + 105 (= 1655)$ or $1250 \div 5 (= 250)$ or $300 \div 5 (= 60)$ or $105 \div 5 (= 21)$ P1 for a full process to find cost per adult e.g. $1655 \div 5 (= 331)$ or $250 + 60 + 21 (= 331)$ cao	
10(a)	240	B1	cao	
10(b)	840	M1 M1 A1	For reading at least 3 of the required figures from the graph e.g. 440, 240, 500, 200, 520, 180 OR $440 - 240 (= 200)$, $500 - 200 (= 300)$, $520 - 180 (= 340)$ OR some method to get 200, 300, 340 (dep) for adding their 3 values for petrol cars e.g. "200"+"300"+"340" cao	



Question	Answer	Mark	Mark scheme	Additional guidance
11	12	P1 P1 A1	For a start to the process e.g. $450 - 70 (= 380)$ oe For complete process e.g. $380 \div 30 (= 12.666 \dots)$ cao	
12	22	M1 A1	For method to find 11% of 200 e.g. $200 \times \frac{11}{100}$ oe (= 22) Or $10\% = 200 \div 10 (= 20)$ plus $1\% = 20 \div 10 (= 2)$ cao	
13	$24i^2 - 36i$	B2 (B1)	For $24i^2 - 36i$ For $24i^2$ or $36i$	
14	1 : 4	M1 A1	For $\frac{1}{5} : \frac{4}{5}$ oe OR for any correct un-simplified ratio cao	
15(a)	24, 26, 27, 28, 30, 32, 33, 34	M1 A1	For listing either set e.g. 24, 27, 30, 33 or 24, 26, 28, 30, 32, 34 with no incorrect numbers 24, 26, 27, 28, 30, 32, 33, 34 with no repeats	
15(b)	Statement or 24 and 30	C1	e.g. even multiples of 3 between 23 and 35 oe	
16	$3\frac{3}{4}$	M1 A1	For $\frac{9}{4} \times \frac{5}{3}$ oe or $\frac{45}{12}$ or $3\frac{9}{12}$ cao	
17	48	P1 P1 A1	For beginning to solve the problem e.g. $33 \div 11 \times 6 (= 18)$ or $16 : 6$ and $6 : 11$ oe (linked) For a full process to solve the problem e.g. $18 \div 6 \times 16 (= 48)$ oe cao	



Question	Answer	Mark	Mark scheme	Additional guidance
18	Estimated value	P1 P1 A1	For using a rounded in a correct process e.g. $9600 \div 50$ or 24×50 or $9600 \div 1200$ For a full process to find the number of days e.g. $9600 \div (24 \times 50)(= 8)$ For a correct answer following through their rounded values	Their rounded value must be used in a calculation Rounding may appear after a correct process Allow the use of 10000, 50 and 20 instead of 9600, 50 and 24
19	176 cm ²	M1 M1 A1 A1	For a method to find the area of a triangular face $\frac{1}{2} \times 8 \times 7 = 28$ (dep) for finding the total surface area e.g. $4 \times "28"(= 112) + 8 \times 8$ For a numerical answer of 176 cm ²	
20	(13, 11)	P1 P1 P1 P1 A1	For process to find width or height of diagram e.g. $28 - 4(= 24)$ or $17 - 5(= 12)$ For process to find length of the base of the triangles e.g. $24 \div 4 = 8$ Or process to find $\frac{3}{8}$ of the distance from P to Q For process to find x coordinate e.g. $24 \times \frac{3}{8} + 4 = 13$ For a process to find y coordinate e.g. $\frac{12}{2} + 5 = 11$ Cao SC: award 4 marks for (11,13)	
21	Line drawn	B3 (B2 (B1	For a correct line between $x = -3$ and $x = 3$ For a correct straight-line segment through at least 3 of (3, 8), (2, 6), (1, 4), (0, 2), (-1, 0), (-2, -2), (-3, -4)) Or for all of these points to be plotted but not joined For at least 2 correct points stated or plotted)	

