Question	Answer	Mark	Comments
	8.6 and 0.4	B1	either order
	9(.0)	B1ft	ft their two numbers SC1 answer 9(.0), cards blank
1(a)	**Additional Guidance**		
	Do not allow misreads of the card values in this question		
	8.6 and 0.27 Answer 8.87		B0B1ft
	8.6 and 6.3 Answer 14.9		B0B1ft
	0.27 and 6.3 Answer 6.57		B0B1ft
	0.27 and 0.4 Answer 0.67		B0B1ft
	6.3 and 0.4 Answer 6.7		B0B1ft
	8.6 + 0.27 = 8.87 Answer 9 (ignore rounding if correct decimal seen)		B0B1ft
	Cards take precedence, but if cards or answer line are blank, mark all other working and award the lowest mark unless their choice is unambiguously identified		
	8.6 and 0.27 in this order only	B1	
	8.33	B1ft	correct or ft their two numbers
1(b)	**Additional Guidance**		
	Do not allow misreads of the cards in this question		
	Examples of follow through (there are many) 0.27 and 8.6 Answer −8.33 6.3 and 0.4 Answer 5.9		B0B1ft
	Cards take precedence, but if cards or answer line are blank, mark all other working and award the lowest mark unless their choice is unambiguously identified		
	22	B1	
2	**Additional Guidance**		
3	9 and 18	B1	

4	26 37 40 48 with no other numbers	B2	any order B1 all 4 correct with one other number or 3 correct with at most two other numbers
	Additional Guidance		
	Ignore repeated numbers		
	26 37 40 48 in working with 4 on answer line		B2
	Ignore numbers with a difference of 4 between their digits out of range for B1 eg 15 26 37 40 48 51		B1

Question	Answer	Mark	Comments
	No and fully correct reason	B2	eg No and it is (£)10 (per day after the first day) or No and it is (£)10.8(0) per day for five days or No and it would be (£)70 for five days or No and you pay more for the first day B1 No and partially correct reason eg No and (£)10.8(0) or fully correct reason with no decision or incorrect decision eg it is (£)10 (per day after the first day)

Additional Guidance		
Equivalent values for (£)10.8(0) per day for five days (£)11.(00) per day for four days (£)11.33 per day for three days (£)12.(00) per day for two days		
Equivalent values for (£)70 for five days (£)56 for four days (£)42 for three days (£)28 for two days		
Do not ignore incorrect reasons with a correct reason for B2		
Calculations must be correct for B2		
Ignore irrelevant reasons with a correct reason		
No, 24 − 14 = 10		B2
No, as next would be 28		B2
No and $(C =) 10n + 4$		B2

(Question number **5** in leftmost column aligned with the Additional Guidance section.)
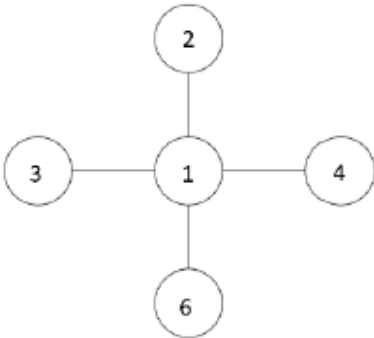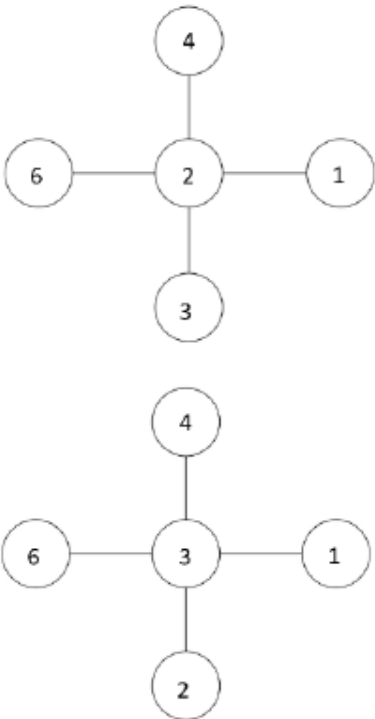
Correct reason stated with decision yes	B1
No, it is £28 (partially correct reason)	B1
No, it is £12	B1
No, 5 × 14 is not 54	B1
States No with no reason	B0
States No with incorrect reason	B0
No, it does not go up by (£)14 per day	B0

6	☐ $x + 10$ is always positive ☐ $x + 10$ is always negative ☐ $x + 10$ cannot be zero ✓ $x + 10$ could be positive or negative or zero	B1	

Q	Answer	Mark	Comments
7	Sometimes true Always true Always true Never true	B4	B1 for each

	Additional Guidance	
	Allow any unambiguous indication eg all 4 correct boxes contain a cross with all other boxes blank	B4
	A row with one tick and some crosses – mark the tick	
	A row with more than one tick is B0 for that row	
	Mark the boxes not the working lines	

Q	Answer	Mark	Comments
8	4.56	B1	

Q	Answer	Mark	Comments
9	$\dfrac{x}{2}$	B1	

Q	Answer	Mark	Comments
10		B2	2 and 6 can be in either order 3 and 4 can be in either order B1 the horizontal line multiplies to 12 or the vertical line multiplies to 12 or the sum of the vertical line is 1 more than the sum of the horizontal line or the sum of the horizontal line is 1 more than the sum of the vertical line

Additional Guidance

Must use 1, 2, 3, 4 and 6 each once and all circles must be completed	
Examples of B1 	B1
Use of a repeated number	B0

Q	Answer	Mark	Comments
11(a)	$5 + 6 - 2 - 8$ or $5 + 6 - 8 - 2$ or $6 + 5 - 2 - 8$ or $6 + 5 - 8 - 2$	B1	

Q	Answer	Mark	Comments
12	1.5	B1	

Q	Answer	Mark	Comments
13	$7b$	B1	

Q	Answer	Mark	Comments	
14(a)	36 or 29 or 92	B1	condone 6.3 or 3.6 or 2.9 or 9.2	
	Additional Guidance			
	Condone eg multiplication signs or 'by' or commas or 'and' eg 3 × 6 or 2 × 9 or 9 by 2			B1
	or 3, 6 or 2, 9 or (9, 2)			B1
	or 3 and 6 or 2 and 9 or 9 and 2			B1
	Only 6 × 3 or 6 by 3 or 6, 3 or (6, 3) or 6 and 3			B0
	Any evaluation included in the answer must be correct			
	More than one correct answer eg 36 and 92			B1
	Allow inclusion of 63 eg 36 and 63			B1
	Inclusion of an incorrect answer eg 36 and 24			B0

Q	Answer	Mark	Comments	
14(b)	Any 2-digit number with at least one digit of 0	B1	eg 50 or −50 condone eg 7.0 or 0.2 or 0.0 condone eg 00 or 01 or 02 etc	
	Additional Guidance			
	Condone eg multiplication signs or 'by' or commas or 'and' eg 5 × 0 or 0 by 5 or 0 × 0			B1
	or 1, 0 or (0, 1) or 0, 0			B1
	or 2 and 0 or 0 and 2 or 0 and 0			B1
	Any evaluation included in the answer must be correct			
	More than one correct answer eg 20 and 30			B1
	Inclusion of an incorrect answer eg 20 and 21			B0

Q	Answer	Mark	Comments	
14(c)	89 or 98 or 99	B1	condone 8.9 or 9.8 or 9.9	
	Additional Guidance			
	Condone eg multiplication signs or 'by' or commas or 'and' eg 8 by 9 or 9 × 8 or 9 × 9			B1
	or (8, 9) or 9, 8 or 9, 9			B1
	or 8 and 9 or 9 and 8 or 9 and 9			B1
	Any evaluation included in the answer must be correct			
	More than one correct answer eg 89 and 98			B1
	Inclusion of an incorrect answer eg 89 and 91			B0

Q	Answer	Mark	Comments
15(a)	20	B1	

Q	Answer	Mark	Comments
15(b)	9	B1	

Q	Answer	Mark	Comments
15(c)	14 and 29	B1	either order

Q	Answer	Mark	Comments
15(d)	15	B1	

Q	Answer	Mark	Comments
	35	B1	
16(a)	**Additional Guidance**		
	Mark the answer line. If this is blank, the answer may be seen on the diagram		

Q	Answer	Mark	Comments
	−2	B1	
16(b)	**Additional Guidance**		
	Mark the answer line. If this is blank, the answer may be seen on the diagram		

Q	Answer	Mark	Comments
	Two even and two odd numbers and the numbers all different and the sum of the four numbers is 46	B2	any order B1 two even and two odd numbers and the sum of the four numbers is 46 **or** the numbers all different and the sum of the four numbers is 46 **or** two even and two odd numbers and the numbers all different and the sum of the four numbers is [36, 56]

	Additional Guidance	

17(a)	☐11 + ☐8 + ☐6 + ☐21		B2
	☐30 + ☐10 + ☐3 + ☐3	(not all different)	B1
	☐8 + ☐12 + ☐10 + ☐16	(no odds)	B1
	☐10 + ☐16 + ☐1 + ☐11	(not 46 but in range)	B1
	☐15 + ☐10 + ☐15 + ☐10	(not all different **and** not 46)	B0
	☐3 + ☐5 + ☐7 + ☐29	(no evens **and** not 46)	B0
	Negatives are acceptable for B1 or B2	
	0 is an even number for B1 or B2, but a blank box does not imply 0	
	Fractions and/or decimals are acceptable for four different numbers that sum to 46 for B1	
	Mark the boxes	

Q	Answer				Mark	Comments
17(b)	3	×	10		B2	either order B1 uses a factor of 12 and the product of the two numbers is [24, 36] or uses a factor of 40 and the product of the two numbers is [24, 36] or the product of the two numbers is 30
	or					
	6	×	5			

Additional Guidance				
3	×	9		B1
7	×	5		B1
30	×	1		B1
15	×	2		B1
Fractions and / or decimals are acceptable for non-factors for B1				
Mark the boxes				

Q	Answer			Mark	Comments
17(c)	36	÷	2	B2	B1 any square number > 1 or any prime number

Additional Guidance				
Allow squares to be written in index form for B2 or B1 eg				
6^2	÷	2		B2
2	÷	36		B1
	÷	9		B1
72	÷	4		B1
Mark the boxes				

Q	Answer	Mark	Comments
18	**Alternative method 1**		
	$n + 1$ is even and odd × even is even	B2	oe B1 $n + 1$ is even or odd × even is even
	Alternative method 2		
	$n^2 + n$ and odd^2 is odd and odd + odd is even	B2	oe B1 $n^2 + n$ or odd^2 is odd and odd + odd is even
	Alternative method 3		
	n and $n + 1$ are consecutive numbers and odd × even is even	B2	oe B1 n and $n + 1$ are consecutive numbers or odd × even is even
	Additional Guidance		
	Alt 1 odd + 1 = even and multiplying an odd and an even = even		B2

Q	Answer	Mark	Comments
19	–5°C	B1	

Q	Answer	Mark	Comments
20	$62 - 54$ or 8 or $54 - 62$ or -8 or $\dfrac{62 - 54}{2}$ or 4 or $\dfrac{54 - 62}{2}$ or -4 or $\dfrac{62 + 54}{2}$ or $\dfrac{116}{2}$ or 58 or $2 + 16 + 13 + 27 = 58$ or $1 + 15 + 12 + 30 = 58$	M1	oe eg $1 + 15 + 16 + 30 - 2 - 12 - 13 - 27$ or $2 + 12 + 13 + 27 - 1 - 15 - 16 - 30$ or $-1 + 3 + 3 + 3$ or $1 - 3 - 3 - 3$
	12 and 16	A1	either order

Additional Guidance		
Up to M1 may be awarded for correct work with no answer, or incorrect answer, even if this is seen amongst multiple attempts		
Answer 12 and 16 even if working unclear (eg many attempts)		M1A1
58 only seen from an incorrect addition		M0

Q	Answer	Mark	Comments
21(a)	6.92	B1	first answer
	7.18	B1	second answer

Q	Answer	Mark	Comments
21(b)	-5 and 4	B1	either order first answer
	-10 and -2	B1	either order second answer

Q	Answer	Mark	Comments
22	3 5 6 7 9	B3	B2 last digit square **and** middle digit even with three of the following constraints met: • only one square • only one even • no repeats • ascending order or 9 7 6 5 3 B1 last digit square with no other squares or middle digit even with no other evens or 3 5 6 7 9 unordered, not scoring B2

Additional Guidance		
Mark the answer line		
1 3 6 7 9 (two squares is only error)		B2
3 5 6 7 1 (order is only error)		B2
3 3 6 7 9 (repeat is only error)		B2
0 3 6 7 9 (two even numbers)		B2
3 3 2 3 9 (order wrong and repeats but middle digit is only even and/or last digit is only square)		B1
3 3 2 3 4 (order wrong and two evens but last digit is only square)		B1
1 3 4 5 7 (middle digit is only even)		B1
2 2 5 6 4 (last digit is only square)		B1
2 3 4 5 6		B0
1 3 4 8 9		B0
Must have 5 single digits		

Q	Answer	Mark	Comments
23	>	B1	
	=	B1	
	<	B1	

Additional Guidance	
Must use the correct symbol, not word equivalents	