

1	$0.32 \times 450 (= 144)$ oe or $\frac{2}{5} \times 375 (= 150)$ oe		3	M1
	$0.32 \times 450 (= 144)$ oe and $\frac{2}{5} \times 375 (= 150)$ oe			M1
		144 and 150 and $\frac{2}{5}$ of 375		A1
Total 3 marks				

2	a	26 or 64	1	B1	or both 26 and 64 with no others
	b	21 or 39	1	B1	or both 21 and 39 with no others
	c	17 or 31	1	B1	or both 17 and 31 with no others
	d	1 or 64	1	B1	or both 1 and 64 with no others
Total 4 marks					

3	a	8632	1	B1	cao
	b	24	1	B1	cao
	c	17	1	B1	cao
Total 3 marks					

4	(a)	0.5, 0.501, 0.51, 0.55	1	B1
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5	(a)(i)	<	1	B1	for <
	(ii)	>	1	B1	for >
	(b)	Neon	1	B1	for neon
	(c)	Mercury	1	B1	for mercury
	(d)	$(-35 - -101) \div 10 (= \pm 6.6)$ or $\pm 66 \div 10 (= \pm 6.6)$ or $(-35 - -101) \div 5$ or $\pm 66 \div 5$ or clearly showing counting down from -35 to -95 in 10's or 5's and indicating times by the side or from 35 to 95 in 10's or 5's and indicating times by the side with at most one error or -95 = 12 mins or -100 = 13 mins or -105 = 14 mins or a correct method to get 66 and one of 60 = 12 mins or 65 = 13 mins or 70 = 14 mins or a correct method to get 66 and clearly showing counting up or down in 10's or 5's or an answer of 13 or 14 or 13.12	2	M1	
		13.2		A1	for 13.2 or 13 minutes 12 seconds
<i>Total 6 marks</i>					

6	(a)	2.0034, 2.08, 2.111, 2.13, 2.7	1	B1	All five numbers must be present may include extra zero's eg 2.7000
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7	(a)		12 348	1	B1
	(b)		84 312	1	B1
	(c)		1,3	2	B2 for both correct values -1 eeoo
	(d)		2,3	2	B2 for both correct values -1 eeoo
					Total 6 marks

8	(a)		7534	1	B1
	(b)	eg 3600 – 3574 or 3745 – 3600		2	M1 for 3600 – “number” or “number” – 3600 where “number” contains the digits 3,4,5,7. Must have attempted to evaluate this calculation
			26		A1 cao
Total 3 marks					

9	(a)	7, 58, 123, 180, 202	1	B1
	(b)	0.015, 0.15, 0.155, 1.15, 1.5	1	B1

10	(a)(i)		6 or 8	1	B1 allow 6 and 8
	(ii)		27	1	B1 cao
	(iii)		25	1	B1 cao
	(iv)		3 or 7 or 11	1	B1 allow two or more of 3, 7, 11
	(b)	$(2^2 + 5) \times (2 + 3^2) = 99$	Two correct pairs of brackets	1	B1 cao
Total 5 marks					

11	(d)		-9, -7, -3, 8, 16	1	B1
	(e)		0.009, 0.04, 0.044, 0.104, 0.2	1	B1 extra zeros at the end are fine and the numbers may be separated by any signs eg < or , etc

12	(a)		0.4, 0.407, 0.47, 0.477, 0.74	1	B1
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13	(d)		2.008, 2.081, 2.8, 2.803, 2.83	2	B2 for all numbers in correct order (B1 for one number when covered leaves the others in order or for all numbers in correct reverse order)
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14	(a)		0.405, 0.45, 0.5, 0.504, 0.54	1	B1
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15	(a)		84, 105, 171, 233, 490	1	B1
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16	(c)		0.04 0.042 0.2 0.204 0.24	1	B1
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