1	**Alternative method 1**		
	120 × 2 or 240 and 120 × 3 or 360	M1	2 may be [2, 2.75) and 3 may be (2.75, 3]
	450 – 120 or 330	M1	
	240 and 360 and 330 and Yes	A1	correct values using their [2, 2.75) and their (2.75, 3] comparing with 330
	Alternative method 2		
	120 × 2 or 240 and 120 × 3 or 360	M1	2 may be [2, 2.75) and 3 may be (2.75, 3]
	their 240 + 120 or 360 and their 360 + 120 or 480	M1dep	oe
	360 and 480 and Yes	A1	correct values using their [2, 2.75) and their (2.75, 3] comparing with given 450
	Alternative method 3		
	450 – 120 or 330	M1	
	their 330 ÷ 120 or 2.75	M1dep	oe eg 450 ÷ 120 – 1 or 3.75 – 1 is M2
	2.75 and Yes	A1	comparing with given 2 and 3
	Alternative method 4		
	450 – 120 or 330	M1	
	their 330 ÷ 2 or 165 and their 330 ÷ 3 or 110	M1dep	2 may be [2, 2.75) and 3 may be (2.75, 3]
	165 and 110 and Yes	A1	correct values using their [2, 2.75) and their (2.75, 3] comparing with given 120

1 cont	**Alternative method 5**		
	2 + 1 or 3 and 3 + 1 or 4	M1	3 may be [3, 3.75) and 4 may be (3.75, 4]
	120 × 3 or 360 **and** 120 × 4 or 480 or 450 ÷ 3 or 150 **and** 450 ÷ 4 or 112(.5)	M1dep	oe 3 may be [3, 3.75) and 4 may be (3.75, 4]
	360 and 480 and Yes or 150 and 112(.5) and Yes	A1	comparing with given 450 or comparing with given 120
	Additional Guidance		
	Use the method that gives the most marks even if there are multiple attempts		
	Yes may be seen by the question or implied by eg It is between 2 and 3 times		
	450 ÷ 120 only or 3.75 only		M0

	Notes £10 £5 Coins 50p 50p 50p 5p	B2	either order for notes any order for coins units must be included for all values B1 correct answer with units not included for all values or two notes and four coins totalling [£16.50, £16.60] with correct units or another combination of notes and coins totalling £16.55 with correct units

	Additional Guidance	
2	Any correct units (may be shown in working) eg 50p may be £0.50, £1 may be 100p, £5 may be 5 pounds Condone £0.50p, £0.05p Condone 10£ for 10 pounds	
	Accept use of £1 £5 £10 notes Accept use of 1p 2p 5p 10p 20p 50p £1 £2 £5 coins	
	Notes 10 5 Coins 50 50 50 5 (correct answer with missing units)	B1
	Notes £10 £5 Coins 100p 50p 2p 2p (total £16.54)	B1
	Notes £10 £5 Coins £1 50p 5p (total £16.55 but only three coins)	B1
	Notes £10 £5 Coins £1 50p 2p 2p 1p (total £16.55 but five coins)	B1
	Notes £5 £5 Coins £2 £2 £2 50p 5p (total £16.55 but five coins)	B1
	Notes £5 £5 £5 Coins £1 50p 5p (total £16.55 but three notes and three coins)	B1
	Incorrect answers may have missing units for the notes for B1 eg Notes 10 5 Coins £1 50p 2p 2p 1p (total £16.55 but five coins)	B1
	Incorrect answers must have correct units for the coins for B1 eg Notes £10 £5 Coins 1 50 2 2 1 (missing units)	B0
	Incorrect units eg do not allow 0.50p 0.05p 0.5p	B0
	Do not allow £0.5 £0.2 £0.1	B0

3	**Alternative method 1**		
	3.2(0) ÷ 5 or 0.64 or 0.29 × 3 or 0.87	M1	oe eg working in pence
	3.2(0) ÷ 5 × 12 + 0.29 × 3 or 7.68 + 0.87	M1dep	oe eg working in pence must be consistent units
	8.55	A1	condone £8.55p
	Alternative method 2		
	12 ÷ 5 or 2.4 or 5 ÷ 12 or 0.41(6…) or 0.417 or 0.42	M1	
	3.2(0) × their 2.4 + 0.29 × 3 or 3.2(0) ÷ their 0.41(6…) + 0.29 × 3	M1dep	oe eg working in pence must be consistent units
	8.55	A1	condone £8.55p
	Additional Guidance		
	Inconsistent units may be recovered in final answer		
	7.68 in working implies M1		

Q	Answer	Mark	Comments
4	4 × 0.35 or 1.4(0) or 4 × 35 or 140 or 3.7(0) – 0.35 or 3.35 or 370 – 35 or 335	M1	oe ignore mixed units
	3.7(0) – their 1.4(0) or 2.3(0) or 370 – their 140 or 230 or their 3.35 – 3 × 0.35 or 2.30 or their 335 – 3 × 35 or 230	M1dep	oe ignore mixed units
	their 2.3(0) ÷ 5 or (0).46 or their 230 ÷ 5	M1dep	oe ignore mixed units
	46	A1	
	Additional Guidance		
	Answer (£)(0).46 or £46		M3A0
	46 seen with further work		M3A0

Q	Answer	Mark	Comments
5	**Alternative method 1**		
	53×3 or 159	M1	
	their $159 \div 12$	M1dep	oe eg $53 \div 4$ for build up method allow one error, must get as far as 1 minibus below their total number of passengers
	13. or 13.2 or 13.25 or 13 r (3) or $13\frac{3}{12}$ or build up method reaches 156 (for 13 minibuses) with no errors	A1	may be implied by correct answer oe fraction
	14	A1ft	ft their decimal or remainder value rounded up to the nearest whole number with M2 scored
	Alternative method 2		
	$53 \div 12$ or 4.4... or 4 r 5 or $4\frac{5}{12}$	M1	
	their $4.4... \times 3$ or $4\frac{5}{12} \times 3$ or $12\frac{15}{12}$	M1dep	oe fraction
	13.(2...) or 13 r (3) or $13\frac{3}{12}$	A1	may be implied by correct answer oe fraction
	14	A1ft	ft their decimal or remainder value rounded up to the nearest whole number with M2 scored

	Additional Guidance	
5 cont	For answers of 14, please check for incorrect working eg 159 ÷ 12 = 14.1 and answer 14 159 ÷ 12 with result 13.8 and answer 14 159 ÷ 12 with result 13 r 2 and answer 14 159 with build up to 13 minibuses is 158 and answer 14	 M2A0A0ft M2A0A1ft M2A0A1ft M2A0A1ft
	159 ÷ 12 with no decimal or remainder value and answer 14 159 ÷ 12 = 13. Answer 13 159 ÷ 12 = 13 Answer 13	M2A2 M2A1A0 M2A0
	14 with no working	M2A2
	159 ÷ 12 with result 13.3 (bod from 13.25) and answer 14	M2A2
	159 ÷ 12 with result 13.3 (bod from 13.25) with no final answer	M2A1A0
	53 ÷ 12 = 4(.) = 5, 5 × 3 = 15, so 15 minibuses (conceptually incorrect) 53 ÷ 12 = 4.7, 4.7 × 3 = 14.1, so 15 minibuses	M1M0A0A0ft M2A0A1ft
	For build up method 53 × 3 = 159, 12 × 13 = 156 53 × 3 = 159, 12 × 13 = 156, 15 minibuses 12 × 13 = 156, without their 159 (don't know what they are building up to)	 M2A1A0 M2A1A0 M0A0
	Build up method reaches 156 (for 13 minibuses) with no errors and no answer, but says "3 more seats needed"	M2A1A0

Q	Answer	Mark	Comments
6	£20 notes 13 £10 notes 2 £5 notes 3	B3	B2 three or four shops correct (A) 3 × £20, 1 × £5 (B) 2 × £20 (C) 5 × £20, 1 × £10, 1 × £5 (D) 3 × £20, 1 × £10, 1 × £5 B1 one or two shop(s) correct SC1 £20 notes 14 £10 notes 1 £5 notes 1
	Additional Guidance		
	Notes may be seen by the table		
	Mark intention for up to B2 eg allow tallies		
	Units may be implied eg Shop A = 20 20 20 5		B1

Q	Answer	Mark	Comments
7	7.35 × 4 or 29.4(0)	M1	oe
	7.35 ÷ 3 or [2.42, 2.45]	M1	oe implied by 14.54 allow 0.33 or better
	their 29.4(0) – (16.99 – their 2.45)	M1dep	oe dep on M1M1
	14.86	A1	
	Additional Guidance		
	Up to M2 may be awarded for correct work, with no or incorrect answer, even if this is seen amongst multiple attempts		
	The first two marks may be seen in either order		
	Do not allow use of 0.3		

8	**Alternative method 1**		
	38 × 10.8(0) or 410.4(0)	M1	oe
	10.8(0) × 0.25 or 2.7(0)	M1	oe
	10.8(0) + their 2.7(0) or 13.5(0)	M1dep	dep on 2nd M1 10.8(0) × 1.25 is 2nd M1 and 3rd M1
	(491.4(0) – their 410.4(0)) ÷ their 13.5(0) or 81 ÷ their 13.5(0) or 6	M1dep	oe eg 6 × 13.5 = 81 or 410.4 + 13.5 + 13.5 + 13.5 + 13.5 + 13.5 + 13.5 = 491.4 dep on M3
	44 with 410.4(0) and 13.5(0) seen	A1	
	Alternative method 2		
	38 × 10.8(0) or 410.4(0)	M1	oe
	491.4(0) – their 410.4(0) or 81	M1dep	
	their 81 ÷ 10.8(0) or 7.5	M1dep	oe
	their 7.5 ÷ 1.25 or 6	M1dep	oe
	44 with 410.4(0) and 7.5 seen	A1	
	Alternative method 3		
	491.4(0) ÷ 10.8(0) or 45.5	M1	oe
	their 45.5 – 38	M1dep	
	7.5	A1	oe may be implied by 6
	their 7.5 ÷ 1.25 or 6	M1dep	oe dep on M2
	44 with 45.5 and 7.5 seen	A1	

8 cont	**Additional Guidance**	
	Choose the scheme that favours the student	
	Up to 3 marks may be awarded for correct work, with no or incorrect answer, even if this is seen amongst multiple attempts	
	Build up attempts must be fully correct or show method	

9	**Alternative method 1**		
	3.25 ÷ 25 or 0.13 or 325 ÷ 25 or 13 or 5 ÷ (2 × 25) or 5 ÷ 50 or 0.1(0) or 500 ÷ (2 × 25) or 500 ÷ 50 or 10	M1	oe cost of a chocolate in a single box cost of a chocolate from special offer
	3.25 ÷ 25 – 5 ÷ (2 × 25) or their 0.13 – their 0.1(0) or 0.03 or 325 ÷ 25 – 500 ÷ (2 × 25) or their 13 – their 10	M1dep	oe their 0.13 and their 0.1(0) must come from correct methods their 13 and their 10 must come from correct methods
	3	A1	condone £0.03 on answer line
	Alternative method 2		
	2 × 3.25 – 5 or 6.5(0) – 5 or 1.5(0) or 2 × 325 – 500 or 650 – 500 or 150	M1	difference in cost of two boxes
	their 1.5(0) ÷ (2 × 25) or 0.03 or their 150 ÷ (2 × 25)	M1dep	oe 1.5(0) ÷ 50 oe 150 ÷ 50
	3	A1	condone £0.03 on answer line
	Alternative method 3		
	3.25 – 5 ÷ 2 or 3.25 – 2.5(0) or 0.75 or 325 – 500 ÷ 2 or 325 – 250 or 75	M1	difference in cost of one box
	their 0.75 ÷ 25 or 0.03 or their 75 ÷ 25	M1dep	
	3	A1	condone £0.03 on answer line

Q	Answer	Mark	Comments
10(a)	252000	B4	B3 60 × 60 × 8 ÷ 4 × 35 oe B2 60 × 60 × 8 ÷ 4 oe or 7200 or 60 × 60 × 8 × 35 oe or 1008000 or 60 × 60 ÷ 4 × 35 oe or 31500 or 60 × 8 ÷ 4 × 35 oe or 4200 B1 60 × 60 × 8 oe or 28800 or 60 × 60 ÷ 4 oe or 900 or 60 × 60 × 35 oe or 126000 or 60 × 8 ÷ 4 oe or 120 or 60 × 8 × 35 oe or 16800 or 60 ÷ 4 × 35 oe or 525 or 8 ÷ 4 × 35 oe or 70

Additional Guidance

B3, B2 and B1 may be awarded for correct work, with no or incorrect answer, even if this is seen amongst multiple attempts	
Condone additional incorrect operations for B3, B2 and B1	
eg1 4 × 60 × 60 × 8 ÷ 4 × 35 (× 4 is an incorrect operation)	B3
eg2 60 × 60 × 8 ÷ 4 × 35 = 252000 and 252000 × 4 = 1008000	B3
eg3 60 × 60 ÷ 4 = 900 and 900 × 480 = 432000 and 432000 × 35 indicates 60 × 60 ÷ 4 × 35 (× 480 includes an additional incorrect operation of × 60)	B3
eg4 35 × 4 = 140 and 140 × 60 × 8 indicates 35 × 60 × 8	B1
The operations may be in any order and may be fragmented	
eg 8 ÷ 4 = 2 and 2 × 35	B1
An incorrect intermediate answer may be part of a correct set of operations	
eg 60 × 8 = 4800 and 4800 ÷ 4 = 1200 and 1200 × 35	B2

Q	Answer	Mark	Comments
10(b)	32.5 ÷ 4	M1	oe
	8.125	A1	oe
	Additional Guidance		
	Accept 8.1 or 8.12 or 8.13		M1A1
	Accept 8 with M1 seen		M1A1
	Ignore truncation or incorrect rounding after correct answer seen		M1A1

Q	Answer	Mark	Comments
11	**Alternative method 1 – working in £**		
	Any correct conversion from pence to pounds	B1	may be seen at any stage
	$0.49 \times \frac{400}{100}$ or 0.49×4 or $0.14 \times \frac{250}{100}$ or 0.14×2.5	M1	
	1.96 or 0.35	A1	
	2.31	A1	
	Alternative method 2 – working in pence		
	$49 \times \frac{400}{100}$ or 49×4 or $14 \times \frac{250}{100}$ or 14×2.5	M1	
	196 or 35	A1	
	231	A1	
	2.31	B1ft	ft their 231 correctly converted to £
	Additional Guidance		
	Reward correct work seen amongst multiple attempts Use the scheme that gives the better mark		
	Condone p after their final answer eg £2.31p		

Q	Answer	Mark	Comments
12(a)	12.2(0) – 8.65 or answer with 55p or 355	M1	oe
	3.55	A1	accept 355p SC1 6.85 or 685p (Company B used)
	Additional Guidance		
	Answer with 55p eg 4.55 or 455p eg 455		M1A0 M0A0
	Condone £3.55p		M1A1

Q	Answer	Mark	Comments
12(b)	7.25×12 or 725×12	M1	oe eg $7 \times 12 + 0.25 \times 12$ accept repeated addition of twelve 7(.)25s
	Correct vertical method of long multiplication with at least one of 1450 and 7250 correct or Correct set up of grid method with at least three products correct or Correct set up of Gelosia method with at least three products correct or $10 \times 725 = 7250$ and $2 \times 725 = 1450$ attempted with at least one correct or $12 \times 700 = 8400$ and $12 \times 20 = 240$ and $12 \times 5 = 60$ attempted with at least one correct	M1dep	oe allow a placeholder space to be present instead of a physical zero in vertical method
	87(.00)	A1	SC2 103.8(0) or 146.4(0) or 169.2(0) or 190.8(0) or 256.2(0) or 250.2(0) or 315.6(0) SC1 8.65×12 or $12.2(0) \times 12$ or $14.1(0) \times 12$ or $15.9(0) \times 12$ or 21.35×12 or 20.85×12 or $26.3(0) \times 12$
	Additional Guidance		
	Condone 87.0		M2A1
	Accept answers in pence		
	Condone p after their final answer eg £87.00p		
	Method of repeated addition must have no more than one error. If broken down into groups, the one error made may be seen multiple times		

Q	Answer	Mark	Comments
13	Cost of 5 litres of cleaning fluid $2 \times 18 + 10$ or $36 + 10$ or 46 or $18 + 3 \times 10$ or $18 + 30$ or 48 or 5×10 or 50	M1	oe cost of 2×2 litres + 1×1 litre or cost of 1×2 litres + 3×1 litre or cost of 5×1 litre
	Cost of machine plus 5 litres of cleaning fluid $25 + 2 \times 18 + 10$ or $25 + 18 + 3 \times 10$ or 73 or $25 + 5 \times 10$ or 75	M1dep	oe
	71(.00p)	A1	SC1 70(.00p)
	Additional Guidance		
	Up to M2 may be awarded for correct work with no, or incorrect answer, even if this is seen amongst multiple attempts		
	Special case is for the correct total from using 2.5 bottles at £18		

Q	Answer	Mark	Comments
14(a)	$(8 - 5) \times 4$ or 3×4 or 12	M1	oe may be implied
	18 – their 12 or 6	M1	oe $8 \leqslant$ their $12 \leqslant 16$ may be implied by their correct ft answer
	7 (pm)	A1ft	allow 7.00 (pm) or 19.00 (pm) ft 1 (pm) + their 6 with M0M1awarded
	Additional Guidance		
	Allow dot, colon, comma, space or no space in time notation		
	$18 - 12 = 6$, Answer 6 (pm)		M1M1A0
	$4 \times 4 = 16$, $18 - 16 = 2$, Answer 3 (pm)		M0M1A1ft
	$3 \times 5 = 15$, $18 - 15 = 3$, Answer 4 (pm)		M0M1A1ft
	$(5 - 8) \times 4 = 12$ (reverse subtraction recovered and could go on to score up to M1M1A1ft)		
	$(5 - 8) \times 4 = 8$ (reverse subtraction not recovered but could go on to score up to M0M1A1ft)		

14(b)	Valid explanation or correct calculation	B1	eg she hasn't multiplied 2 by 3 or $3 \times 2 = 6$ or answer is 18
	Additional Guidance		
	A correct calculation may be seen by Sofia's work		
	It should be 3×6		B1
	It should be 18		B1
	$3 \times 6 = 18$		B1
	3 should be 6		B1
	Needs to multiply everything in the brackets (by 3)		B1
	She should have done the brackets first		B1
	She should have added 4 and 2 first		B1
	She did 3×4 but not 3×2		B1
	She didn't use BIDMAS and work out the brackets first		B1
	Accept highlighting the second 3 as the error (with no subsequent incorrect calculation seen) eg It shouldn't be + 3		B1
	A correct calculation or answer 18 with any or no explanation		B1
	A correct explanation alongside an incorrect calculation		B0
	She didn't use BODMAS / BIDMAS		B0
	She didn't expand / multiply out the brackets correctly		B0
	3 should be 2		B0
	It should be 14		B0
	The brackets are in the wrong place		B0

Q	Answer	Mark	Comments
15	$8 \times (0.)60$ or 480 or 4.8(0)	M1	oe
	10 – their 4.8(0) or 5.2(0) or 1000 – their 480 or 520	M1	oe $0.6(0) \leqslant$ their 4.8(0) < 10 $60 \leqslant$ their 480 < 1000 5.2(0) or 520 implies M2
	26	A1	
	Additional Guidance		
	Up to M2 may be awarded for correct work, with no or incorrect answer, even if this is seen amongst multiple attempts		
	$60 \div 8 = 7.50$ then $10 - 7.50$		M0M1A0

Q	Answer	Mark	Comments
16	**Alternative method 1**		
	$5.6 \div 7$ or 0.8	M1	oe
	5.6 + their 0.8 or 6.4	M1	oe their 0.8 must not be 0.4 and must be less than 5.6
	their 6.4 – 6 or 0.4	M1dep	oe dep on 2nd M1
	400	A1	SC1 any correct conversion litres to millilitres with M0 scored
	Alternative method 2		
	5.6×1000 or 5600 or 6×1000 or 6000 or $5.6 \div 7$ or 0.8	M1	oe
	their $5600 \div 7$ or their 0.8×1000 or 800	M1	oe their 5600 must include the digits 56 consecutively their 0.8 must not be 0.4 and must be less than 5.6
	their 5600 + their $5600 \div 7$ or their 5600 + their 0.8×1000 or 6400	M1dep	oe their 5600 must include the digits 56 consecutively their 0.8 must not be 0.4 and must be less than 5.6 dep on 2nd M1
	400	A1	SC1 any correct conversion litres to millilitres with M0 scored

16 cont	**Additional Guidance**	
	Up to M3 may be awarded for correct work, with no or incorrect answer, even if this is seen amongst multiple attempts	
	Beware of 0.4 or 400 from incorrect working	
	6400 or 0.4 (not from incorrect working)	M1M1M1
	0.9 and 6.5 and 0.5 or 0.9 and 6.5 and 500 (500 implies 0.5)	M0M1M1A0
	560 ÷ 7 and 560 + 80 (560 includes the digits 56 consecutively)	M0M1M1A0
	560 and 80 and 640	M0M1M1A0
	560 and 600 and 80 and 40	M0M1M1A0
	In Alt 2, 0.0056 ÷ 7 (0.0056 includes the digits 56 consecutively)	M0M1

Q	Answer	Mark	Comments
17	2×3.5 or 7	M1	oe implied by 5.7(…) or 5 r 5 or 42
	Ticks No and 5.7(…) or Ticks No and 42	A1	oe eg $\frac{40}{7}$ is less than 6
	Additional Guidance		
	Ignore area and volume calculations		
	Ticks No and 5 r 5		M1A1
	Ticks No and $5\frac{5}{7}$		M1A1
	Ticks No and 2 cm too short		M1A1
	Ticks Yes and 5.7(…)		M1A0
	12×3.5		M1

Q	Answer	Mark	Comments
18	$330 \div (3 + 2)$ or $330 \div 5$ or 66	M1	oe eg $\frac{330}{5}$
	their 66×2 or 132	M1dep	oe $\frac{2}{5} \times 330$ scores M2
	$294 \div 7$ or 42 or $294 \div 7 \times 3$ or 126	M1	oe eg $\frac{294}{7}$ or $\frac{3}{7} \times 294$
	132 and 126 and A	A1	
	Additional Guidance		
	132 and 88.2 and A		M1M1M0A0

Q	Answer	Mark	Comments
19	24 ÷ 2 or 12 or 24 × 5 or 120 or 820 or 7 – 1.5(0) or 5.5(0)	M1	oe
	5 × 24 ÷ 2 or 60 or 2.1(0) or 210(p)	M1	oe implies M2
	7 – 1.5(0) + 5 × 24 ÷ 2 or 8.2(0) – 2.1(0) or 6.1 or 610	M1dep	oe full method to find total cost dep on M2
	6.10 or 610p	A1	SC3 65.5(0) or 6550(p) or 27.62 or 2762(p) or 7.9(0) or 790(p)
	Additional Guidance		
	SC3 65.5(0) from 60 + 5.50 working in mixed units		
	SC3 27.62 from 5 calculators and 1 pen		
	SC3 7.9(0) from doubling the cost of a pen instead of halving		
	Condone (£)6.10p		M1M1M1A1
	Allow mixed units for up to M3 eg 5.50 + 60		M1M1M1

<table>
<tr><th>Q</th><th>Answer</th><th>Mark</th><th>Comments</th></tr>
<tr><td rowspan="6">20</td><td>45 × 8 or 360</td><td>M1</td><td>oe
number of 2p coins
may be embedded</td></tr>
<tr><td>45 × 8 × 2
or 360 × 2
or 720 or 7.2(0)</td><td>M1dep</td><td>oe
value of 2p coins
implied by 1170 or 11.7(0)</td></tr>
<tr><td>17.7(0) – their 7.2(0) – 45 × 0.1(0)
or
1770 – their 720 – 45 × 10
or
6(.00) or 600</td><td>M1dep</td><td>oe
value of 5p coins
implied by 7.2 : 6 oe ratio not in simplest form
or 6 : 7.2 oe ratio</td></tr>
<tr><td>6 : 5</td><td>A1</td><td>accept 1.2 : 1 or $\frac{6}{5}$: 1 or $1\frac{1}{5}$: 1
or 1 : 0.83(...) or 1 : $\frac{5}{6}$</td></tr>
<tr><td colspan="3">Additional Guidance</td></tr>
<tr><td colspan="3">
<table>
<tr><td>Up to M3 may be awarded for correct work with no answer or incorrect answer, even if this is seen amongst multiple attempts</td><td></td></tr>
<tr><td>Allow working in pence or pounds throughout</td><td></td></tr>
<tr><td>Must work consistently in pence or pounds for the third mark (or recover)</td><td></td></tr>
<tr><td>Ignore units in the ratio eg 6p : 5p or £1.20 : £1</td><td>M3A1</td></tr>
<tr><td>720 may be seen in a ratio with the value of the 10p coins
eg 720 : 450 or 7.2 : 4.5</td><td>M2</td></tr>
<tr><td>600 may be seen in a ratio with the value of the 10p coins
eg 600 : 450 or 6 : 4.5</td><td>M3</td></tr>
</table>
</td></tr>
<tr><td colspan="3">For information:
<table>
<tr><td>Coin</td><td>10p</td><td>2p</td><td>5p</td></tr>
<tr><td>Number</td><td>45</td><td>360</td><td>120</td></tr>
<tr><td>Value</td><td>£4.50</td><td>£7.20</td><td>£6.00</td></tr>
</table>
</td></tr>
</table>

Q	Answer	Mark	Comments
21	9.5 × 100 or 950 or 20 ÷ 100 or 0.2 or 2 × 20 ÷ 100 or 0.4	M1	oe 930 implies 950 9.3 implies 0.2
	their 950 – 2 × 20 or their 950 – 40 or 910 or 9.5 – 2 × their 0.2 or 9.5 – their 0.4 or 9.1	M1dep	oe eg 950 – 20 – 20 oe eg 9.5 – their 0.2 – their 0.2
	910 cm or 9.1 m	A1	oe
	Additional Guidance		
	Up to M2 may be awarded for correct work, with no answer or incorrect answer, even if this is seen amongst multiple attempts		
	9 m 10 cm on answer line		M1M1A1
	Units may be seen in working but must be seen with the correct value eg 910 on answer line with 910 cm seen in working		M1M1A1
	9.5 – 2 × 20 = 910 centimetres or 9.1 metres		M1M1A1
	9.5 – 2 × 20 = 910 or 9.1		M1M1A0
	Do not ignore further incorrect conversion after correct answer seen eg 910 cm = 91 m		M1M1A0

Q	Answer	Mark	Comments
22	$25 \times 10.2(0)$ or 255	M1	oe
	$10 - 7 + 3 - 1$ or $3 + 2$ or 5 or $(10 - 7) \times 11.8(0)$ or $3 \times 11.8(0)$ or 35.4(0) or $(3 - 1) \times 11.8(0)$ or $2 \times 11.8(0)$ or 23.6(0)	M1	oe
	their $5 \times 11.8(0)$ or their 35.4(0) + their 23.6(0) or 59	M1dep	oe dep on 2nd M their 35.4(0) and their 23.6(0) must both be from correct methods
	314(.00)	A1	SC2 325.8(0) or 337.6(0)
	Additional Guidance		
	314.0		M3A0

Q	Answer	Mark	Comments
23	**Alternative method 1**		
	2450 ÷ (2 + 5) or 2450 ÷ 7 or 350	M1	oe
	their 350 × 5 or 1750 or their 350 × 2 or 700 or their 350 ÷ 4 or 87.5(0)	M1dep	oe 2450 × $\frac{5}{7}$ is M2 2450 × $\frac{2}{7}$ is M2 2450 ÷ 28 is M2
	their 1750 ÷ 4 or (2450 – their 700) ÷ 4 or their 87.5(0) × 5 or 437.5(0)	M1dep	oe dep on M2 350 × $\frac{5}{4}$ is M3
	437.5(0) and Yes	A1	accept 437.5(0) > 430
	Alternative method 2		
	2450 ÷ 4 or 612.5(0)	M1	oe
	their 612.5(0) ÷ (2 + 5) or their 612.5(0) ÷ 7 or 87.5(0)	M1dep	oe 2450 ÷ 28 is M2
	their 87.5(0) × 5 or their 612.5(0) – their 87.5(0) × 2 or 437.5(0)	M1dep	oe dep on M2 612.5(0) × $\frac{5}{7}$ is M3
	437.5(0) and Yes	A1	accept 437.5(0) > 430

23 cont	**Alternative method 3**		
	430 × 4 or 1720	M1	
	2450 ÷ (2 + 5) or 2450 ÷ 7 or 350	M1	oe
	their 350 × 5 or 1750 or their 350 × 2 or 700	M1dep	oe dep on 2nd M $2450 \times \frac{5}{7}$ is M2 $2450 \times \frac{2}{7}$ is M2
	1720 and 1750 and Yes	A1	2450 – 1720 = 730 and 700 and Yes
	Alternative method 4		
	430 × 4 or 1720	M1	
	their 1720 ÷ 5 or 344 or their 1720 × 2 or 3440	M1dep	oe
	their 344 × 2 or their 3440 ÷ 5 or 688	M1dep	oe dep on M2 $1720 \times \frac{2}{5}$ is M3
	2408 and Yes	A1	
	Additional Guidance		
	Up to M3 may be awarded for correct work, with no answer or incorrect answer, even if this is seen amongst multiple attempts		
	2450 ÷ 7 × 1.25 or 350 × 1.25		M1M1M1
	Yes may be implied eg They receive 7.50 more than 430		M3A1
	Condone £437.50p and Yes		M3A1

Q	Answer	Mark	Comments
24 (a)	3 × 3.2(0) or 9.6(0) or 3.2(0) ÷ 2 or 1.6(0) or 4 × 3.2(0) or 12.8(0) or 3.5	M1	oe eg 3 × 320 or 960
	3 × 3.2(0) + 3.2(0) ÷ 2 or 4 × 3.2(0) – 3.2(0) ÷ 2 or 3.5 × 3.2(0) or 11.2 or 1120	M1dep	oe eg 3 × 320 + 320 ÷ 2 or 7 × 1.6(0)
	11.20	A1	accept 1120p
	Additional Guidance		
	Allow mixed units for up to M1M1dep eg 3 × 3.2(0) + 320 ÷ 2		M1M1
	Condone £11.20p		M1M1A1
	Up to M2 may be awarded for correct work, with no or incorrect answer, even if seen amongst multiple attempts		

Q	Answer	Mark	Comments
25(a)	Any correct conversion using values given 800 ÷ 1000 or 0.8 or 2.1 × 1000 or 2100 or 1.9 × 1000 or 1900 or 2.7 (× 1000) or 2700 or 0.2 × 1000 or 200	M1	oe eg 0.800 may be seen in 2nd M1 2.7 or 4.8 or 2.9 implies 0.8 4800 implies 2100 and 1900 2900 implies 2100
	1.9 + their 0.8 – 2.1 or their 1900 + 800 – their 2100 or their 0.8 – (2.1 – 1.9) or 800 – (their 2100 – their 1900) or 600	M1	oe allow their conversions allow mixed units eg 1.9 + 800 – 2.1
	0.6	A1	
	Additional Guidance		
	Check diagram		
	600 (implies 2100 and 1900)		M1M1
	Accept additional zeroes in the answer eg 0.600 or 00.6		M1M1A1
	No correct unit changes or no changes attempted can score M0M1A0 but calculation must be seen eg 190 + 800 – 210 = 780		M0M1A0
	Up to M2 may be awarded for correct work, with no or incorrect answer, even if seen amongst multiple attempts		

Q	Answer	Mark	Comments
26	**Alternative method 1** Using number of coins left		
	295 ÷ 8 or 36(.875) or 36.88 or 36.9	M1	oe implied by (295 ÷ 20) ÷ 8 or 14.75 ÷ 8 or 1.84…
	their 36 × 8 or 288 or their 36.875 – their 36 or 0.8(75) or 0.88	M1dep	oe their 36 must be an integer
	295 – their 288 or their 0.875 × 8 or 7 (coins left)	M1dep	oe implied by 0.875 × 20 × 8 or 0.875 × 160 or 140 or 1.4
	1.40	A1	
	Alternative method 2 Using total value of coins given		
	295 ÷ 8 or 36(.875) or 36.88 or 36.9	M1	oe implied by (295 ÷ 20) ÷ 8 or 14.75 ÷ 8 or 1.84…
	their 36 × 20 × 8 or their 36 × 160 or 5760	M1dep	oe their 36 must be an integer
	295 × 20 or 5900	M1	oe
	1.40	A1	
	Alternative method 3 Using value of coins given to each child		
	295 ÷ 8 or 36(.875) or 36.88 or 36.9	M1	oe implied by (295 ÷ 20) ÷ 8 or 14.75 ÷ 8 or 1.84…
	their 36 × 20 or 720	M1dep	oe their 36 must be an integer
	295 ÷ 8 × 20 or 5900 ÷ 8 or 737(.5) or 738	M1dep	oe dep on 1st M1 only
	1.40	A1	

	Additional Guidance	
26 cont	Up to M3 may be awarded for correct work with no answer, or incorrect answer, even if this is seen amongst multiple attempts	
	Use the scheme that awards most marks	
	Methods are shown in pence but equivalent working may be in pounds	
	NB 7 coins per child or (£)7, possibly from truncating £7.37 or £7.20 or from 56 ÷ 8, does not imply M3 in Alt 1. The 7 must be coins left	
	Alt 3 740 or 7.4(0) with no method does not imply 737.5 or 7.375	
	In Alt 2 the 3rd mark is **not** dependent	
	Note that the third mark in Alt 3 implies the first mark ie 737(.5) or 738	M1M0M1

Q	Answer	Mark	Comments
27(a)	38.5(0) × 40000	M1	oe implied by digits 154
	1540000	A1	oe eg 1.54 × 10^6 or 1.54 million or 1.54 m SC1 3080000 or 770000
	Additional Guidance		
	Allow any commas or spaces eg 154,00,00		M1A1
	Using decimal points is A0, even if 1540000 seen in working eg 15400.00		M1A0
	1540000 seen in working but loses or gains one zero on answer line is acceptable as a transcription error eg 1540000 seen and answer 15040000 or answer 154000		M1A1
	Do not allow the A1 for further work (but may gain M1 eg for digits 154 seen or SC1)		

Q	Answer	Mark	Comments
27(b)	It is not possible to tell	B1	

27(c)	**Alternative method 1** Working out the increase using 35%		
	55 000 – 40 000 or 15 000	M1	oe
	0.35 × 40 000 or 14 000	M1	oe
	15 000 and 14 000 and Yes	A1	oe
	Alternative method 2 Working out the tickets for the second or first match using 35%		
	0.35 × 40 000 or 14 000	M1	oe
	40 000 + 0.35 × 40 000 or 54 000 or 55 000 – 0.35 × 40 000 or 41 000	M1dep	oe 1.35 × 40 000 scores M2
	54 000 and Yes or 41 000 and Yes	A1	oe
	Alternative method 3 Working out the percentage increase		
	55 000 – 40 000 or 15 000 or $\frac{55\,000}{40\,000}$ or 1.375	M1	oe
	$\frac{55\,000 - 40\,000}{40\,000}$ or $\frac{15\,000}{40\,000}$ or $\frac{55\,000}{40\,000} - 1$ or $1.375 - 1$ or 0.375 or 37.5 or 1.375 **and** 1.35	M1dep	oe eg $\frac{55 - 40}{40}$
	37.5 and Yes or 0.375 and 0.35 and Yes or 1.375 and 1.35 and Yes	A1	oe

	Additional Guidance	
27(c) cont	Up to M2 may be awarded for correct work with no answer, or incorrect answer, even if this is seen amongst multiple attempts	
	May use sales of tickets but must use 1 540 000 **Alt 1** $55\,000 \times 38.5 - 40\,000 \times 38.5$ or $2\,117\,500 - 1\,540\,000$ or $577\,500$ $0.35 \times 1\,540\,000$ or $539\,000$ $577\,500$ and $539\,000$ and Yes **Alt 2** $0.35 \times 1\,540\,000$ or $539\,000$ $1\,540\,000 + 539\,000$ or $2\,079\,000$ or $2\,117\,500 - 539\,000$ or $1\,578\,500$ $2\,079\,000$ and $2\,117\,500$ and Yes or $1\,578\,500$ and $1\,540\,000$ and Yes **Alt 3** $55\,000 \times 38.5 - 40\,000 \times 38.5$ or $2\,117\,500 - 1\,540\,000$ or $577\,500$ or $\frac{2\,117\,500}{1\,540\,000}$ $\frac{2\,117\,500 - 1\,540\,000}{1\,540\,000}$ 37.5 and Yes	 M1 M1 A1 M1 M1dep A1 M1 M1dep A1
	Only $40\,000 - 55\,000$ (may be recovered)	M0
	In Alt 1 the 2nd mark is **not** dependent	
	Build-up to 35% must be correct or full method must be shown	
	Accept $35\% \times 40\,000$ for 2nd mark of Alt 1 or 1st mark of Alt 2	M1

Q	Answer	Mark	Comments
28(a)	$1.2 \times 20 = 24$ and $40 - 24 = 16$	B1	oe eg $1.2 \times 20 = 24$ and $24 + 16 = 40$ or $40 - 16 = 24$ and $24 \div 20 = 1.2$ or $24 + 16 = 40$ and $24 \div 1.2 = 20$ may be seen as one calculation eg $40 - 1.2 \times 20 = 16$ or $16 + 1.2 \times 20 = 40$ or $40 - 16 = 1.2 \times 20$
	Additional Guidance		
	$40 - 24 = 16$ and $40 - 16 = 24$ and $24 + 16 = 40$ are equivalent		
	$1.2 \times 20 = 24$ and $24 \div 1.2 = 20$ and $24 \div 20 = 1.2$ are equivalent		
	$40 - 24 = 16$ or $16 + 24 = 40$ or $40 - 16 = 24$		B0
	(20 minutes =) 24 litres leak out $40 - 24 = 16$		B0
	$1.2 \times 20 = 24$ 16 litres left		B0
	Allow unambiguous working in ml and/or seconds		
	For eg $40 - 24 = 16$ condone $24 - 40 = 16$ or $24 - 40 = -16$		
	Condone incorrect use of equals sign eg $1.2 \times 20 = 24 + 16 = 40$ or $1.2 \times 20 = 24 - 40 = 16$		B1
	Correct response with irrelevant work		B1
	16 from two different ways with one way incorrect is choice eg $1.2 \times 20 = 24$ and $40 - 24 = 16$ and $20 \div 1.2 = 16$		B0

Q	Answer	Mark	Comments
28(b)	3	B1	
	Correct method for gradient eg $\frac{40-16}{15-\text{their } 3}$ or $\frac{24}{12}$	M1	oe eg $\frac{30-25}{10-7.5}$ or $\frac{10}{5}$ or $40-38$
	2	A1ft	correct or ft their 3
	Additional Guidance		
	Note that their 3 can be used to work out the rate but does not have to be		
	Values seen on graph must be used correctly eg 24 and 12 seen on the graph is M0 unless subsequently used correctly in attempt to work out the gradient		
	A1ft answers must be to 1 dp or better eg 3.5 $\frac{40-16}{15-3.5}$ 2.1 (accept 2.08…)		B0 M1 A1ft
	After B0 the method may be implied (use $\frac{40-16}{15-\text{their } 3}$ to check) eg 6 2.7 (accept 2.66…)		B0 M1A1ft
	If the report is blank, 3 and 2 must be unambiguously identified in working to be acceptable		
	Allow 2 to be written as $\frac{2}{1}$		

Q	Answer	Mark	Comments
29	**Alternative method 1** – capacity of 9 tins of white paint and 4 tins of red paint compared with the 2500 ml bucket capacity		
	3630 ÷ 11 or 330 or 9 × 140 or 1260	M1	oe
	their 330 × 4 or 1320 or 2500 – their 1260 or 1240 or 2500 – their 330 × 4 or 1180	M1dep	oe $3630 \times \frac{4}{11}$ is M2 their 330 and their 1260 must be from correct methods
	their 1260 + their 1320 or 2580 **or** 2500 – their 1320 and their 1260 **or** their 1180 and their 1260 **or** 2500 – their 1260 and their 1320 **or** their 1240 and their 1320	M1dep	oe eg 2500 – 1320 or 1180 **and** 1180 – 140 – 140 – 140 – 140 – 140 – 140 – 140 – 140 – 140 or –80 their 1180, their 1240, their 1260 and their 1320 must be from correct methods
	2580 and No **or** 1180 and 1260 and No **or** 1240 and 1320 and No or (–)80 and No	A1	oe eg1 No, there is 80 too much eg2 No, only 60 ml of the last tin will fit into the bucket

29 cont	**Alternative method 2** – The number of tins of white or red paint that can be added to 4 tins of red or 9 tins of white paint to fill the 2500 ml bucket		
	$3630 \div 11$ or 330 or 9×140 or 1260	M1	oe
	their 330×4 or 1320 or 2500 – their 1260 or 1240 or 2500 – their 330×4 or 1180	M1dep	oe $3630 \times \frac{4}{11}$ is M2 their 330 and their 1260 must be from correct methods
	$\frac{2500 - \text{their } 1320}{140}$ or $\frac{\text{their } 1180}{140}$ or [8.4, 8.43] or $\frac{2500 - \text{their } 1320}{9}$ or $\frac{\text{their } 1180}{9}$ or 131(.1…) or $\frac{2500 - \text{their } 1260}{\text{their } 330}$ or $\frac{\text{their } 1240}{\text{their } 330}$ or [3.75, 3.8] or $\frac{2500 - \text{their } 1260}{4}$ or $\frac{\text{their } 1240}{4}$ or 310	M1dep	oe their 330, their 1180, their 1240, their 1260 and their 1320 must be from correct methods
	[8.4, 8.43] and No or [3.75, 3.8] and No or 131(.1…) and No or 310 and No	A1	oe

29 cont	**Alternative method 3** – 4 tins of red paint as a proportion of 2500 ml added to 9 tins of white as a proportion of 2500 ml		
	3630 ÷ 11 or 330 or 9 × 140 or 1260	M1	oe
	$\frac{\text{their } 330 \times 4}{2500}$ or 0.52(8) or 0.53 or $\frac{\text{their } 1260}{2500}$ or 0.504 or 0.5(0)	M1dep	oe their 330 and their 1260 must be from correct methods
	$\frac{\text{their } 330 \times 4}{2500}$ or 0.52(8) or 0.53 **and** $\frac{\text{their } 1260}{2500}$ or 0.504 or 0.5(0)	M1dep	oe
	0.528 + 0.504 = 1.032 and No	A1	oe eg1 0.53 + 0.5 = 1.03 and No eg2 52(%) + 50(%) > 100(%) and No
	Alternative method 4 – 4 tins of red paint as proportion of 2500 ml compared with the volume of the bucket remaining after 9 tins of white added as a proportion of 2500 ml		
	3630 ÷ 11 or 330 or 9 × 140 or 1260	M1	oe
	$\frac{\text{their } 330 \times 4}{2500}$ or 0.52(8) or 0.53 or $\frac{2500 - \text{their } 1260}{2500}$ or 0.49(6) or 0.5(0)	M1dep	oe their 330 and their 1260 must be from correct methods
	$\frac{\text{their } 330 \times 4}{2500}$ or 0.52(8) or 0.53 **and** $\frac{2500 - \text{their } 1260}{2500}$ or 0.49(6) or 0.5(0)	M1dep	oe their 330 and their 1260 must be from correct methods
	0.528 > 0.496 and No	A1	oe eg1 0.53 > 0.5 and No eg2 52(%) > 50(%) and No

	Additional Guidance	
	Up to M3 may be awarded for correct work, with no or incorrect answer, even if this is seen amongst multiple attempts	
	Allow working in other units eg litres but units must be consistent for the 3rd mark	
	No may be implied eg1 2580 and there is 80 (ml) too much paint eg2 8.4 tins so 9 tins is too much	
29 cont	2580 and No	M1M1M1A1
	1180 and 1260 and No	M1M1M1A1
	1240 and 1320 and No	M1M1M1A1
	80 and No	M1M1M1A1
	Condone 1180 – 1260 = 80 and No	M1M1M1A1
	Condone an incorrect statement after the correct answer seen eg 1180 and 1260 and –80 and No, there is 60ml left in the 9th tin	M1M1M1A1

Q	Answer	Mark	Comments
30 (a)	A trial of at least 3 portions involving small and large with correct total seen or 24 and 20 chosen or 4 × 6 (= 24) and 2 × 10 (= 20)	M1	eg 2 × 6 + 10 = 22 or 3S and 2L is 38
	4 small and 2 large	A1	
	Additional Guidance		
	Ignore incorrect trials if a correct trial or the correct answer is seen		
	Any unambiguous indication eg 2L 4S		M1A1
	5 × 6 + 2 × 10 = 54		M0

Q	Answer	Mark	Comments
31	9 × 25 or 225	M1	oe in pounds
	1000 – their 225 or 775	M1	oe in pounds their 225 must be less than 1000 775 implies M1M1
	their 775 ÷ 60 or 12.(9…) or method to get to within one multiple of 60 for their 775 or 720 or 780	M1	oe in pounds their 775 must be less than 1000 and bigger than 60 allow one error in any build-up method 775 ÷ 60 implies M1M1M1
	12 with no errors in working	A1	
	Additional Guidance		
	Allow mixed units for method marks		
	For build-up or build-down allow one error eg1 1000 – 250 = 750, 60, 120, 180, 240, 300, 360, 420, 480, 540, 600, 660, 720 answer 12		M0M1M1A0
	eg2 9 × 25 = 125, 1000 – 125 = 885, 60, 120, 180, 240, 300, 360, 420, 480, 540, 600, 660, 720, 760, 820, 880 answer 14		M1M1M1A0
	eg3 9 × 25 = 225, 1000 – 225 = 775, 60, 120, 180, 240, 300, 360, 420, 480, 520, 580, 640, 700, 760 answer 13		M1M1M1A0
	eg4 9 × 25 = 225, 1000 – 225 = 775, 715, 655, 595, 535, 475, 415, 375, 315, 255, 195, 135, 75, 15 answer 13		M1M1M1A0
	eg5 9 × 25 = 250, 10 × 60 = 600, 2.50 + 600 = 8.50, 9.10, 9.70 answer 12 (the 750 is implied)		M1M1M1A0

Q	Answer	Mark	Comments
32(a)	$2 \times 8.5(0)$ or 17(.00)	M1	oe
	38 – their 17 or 21	M1dep	
	their $21 \div 5$ or 4.2	M1dep	oe eg $5 \times 4.2(0)$
	4.20	A1	correct money notation SC2 5.90 SC1 5.9
	Additional Guidance		
	Special case is for using 1 metre of linen at £8.5(0)		
	Allow 4.20(p) for the A mark		
	$4.20 \div 5 = 84$p		M1M1M1 A0

Q	Answer	Mark	Comments
32(b)	14×0.65 or 9.1(0) or 15×0.65 or 9.75 or $10 \div 0.65$ or 15.3(…) or 15.4 or $(5 – 7 \times 0.65) \times 2$ or 0.9(0)	M1	oe allow in pence
	No and 15 with M1 awarded or No and (£)9.75	A1	oe eg No and she can get 1 more with M1 awarded
	Additional Guidance		
	Yes ticked		max M1A0
	No may be implied if neither box ticked		
	$0.65 \times 14 = 9.1$ she can buy another No ticked		M1A1
	$10 \div 0.65 = 15.38$ No ticked		M1A0
	$0.65 \times 14 = 9.1$ she can buy more No ticked		M1A0
	She can get 15 not 14 No ticked		M0A0
	The left over change would make up another 65p so enough for another button No ticked		M0A0

Q	Answer	Mark	Comments
33	0.4 or 0.8 or 220 or 700	M1	oe
	$2.2 + 2 \times 0.4 + 7$ or 10 or 1000	M1	oe allow mixed units 10 or 1000 implies M2
	$\frac{7}{10}$ or $\frac{700}{1000}$	A1	oe fraction SC2 0.7(0) or 70%
	Additional Guidance		
	Ignore simplification attempts after a correct fraction is seen		
	$\frac{7}{10}$ in working with 0.7 on answer line		M1M1A0
	Condone eg 0.80p for first M1		
	Do not allow eg £220 for first M1		

Q	Answer	Mark	Comments
34	5×24.5 or 122.5	M1	oe
	24.5×0.2 or 4.9	M1	oe
	24.5 – their 4.9 or 19.6	M1dep	oe dep on 2nd M1 24.5×0.8 oe is 2nd M1 and 3rd M1
	(259.7 – their 122.5) ÷ their 19.6 or 137.2 ÷ their 19.6	M1dep	oe dep on 3rd M1 eg1 $7 \times 19.6 = 137.2$ eg2 122.5 + 19.6 + 19.6 + 19.6 + 19.6 + 19.6 + 19.6 + 19.6 = 259.7
	12 with 19.6 seen or 12 with 122.5, 142.1, 161.7, 181.3, 200.9, 220.5, 240.1, 259.7	A1	
	Additional Guidance		
	Up to M3 may be awarded for correct work, with no or incorrect answer, even if this is seen amongst multiple attempts		
	Build up attempts must be fully correct or show method		
	122.5 + 19.6		M1M1M1
	122.5, 142.1, 161.7, 181.3, 200.9, 220.5, 240.1, 259.7 without 12		M1M0M0M0

Q	Answer	Mark	Comments
35	**Alternative method 1: population density of Town A**		
	84 000 ÷ (7 × 2.6) or [4615, 4616]	M2	oe M1 84 000 ÷ 7 or 12 000 oe or 7 × 2.6 or 18.2 oe
	Town B and [4615, 4616]	A1	
	Alternative method 2: comparing one square mile of population		
	84 000 ÷ 7 or 12 000	M1	oe
	4695 × 2.6 or 12 207	M1	oe
	Town B and 12 000 and 12 207	A1	
	Alternative method 3: comparing seven square miles of population		
	4695 × 2.6 × 7 or 85 449	M2	oe M1 4695 × 2.6 or 12 207 oe or 7 × 2.6 or 18.2 oe
	Town B and 85 449	A1	
	Alternative method 4: comparing areas with equal populations		
	7 × 2.6 or 18.2	M1	oe
	84 000 ÷ 4695 or [17.89, 17.9] or 18	M1	oe
	Town B **and** 18.2 **and** [17.89, 17.9] or 18	A1	