



Ration and Percentage

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1	1	86.7 or 86.74 to 86.75	1	
2	4	7.7	2	M1 for $44 \times \frac{17.5}{100}$ oe
3	1	847	1	
4	2	3.75 or $3\frac{3}{4}$	1	
5	10	9 h 12 min	3	M1 for 8×1.15 A1 for 9.2 B1 ft independent for their 9.2 correctly converted into hours and minutes
6	5	88.2(0)	2	M1 for 84×1.05 oe
7	10	20.6 or 20.58 to 20.59	3	M2 for $\frac{85-67.5}{85} \times 100$ or $\left(1 - \frac{67.5}{85}\right) \times 100$ or M1 for $\frac{85-67.5}{85}$ or $\frac{67.5}{85} \times 100$ If zero scored SC1 for $\frac{67.5-85}{85} \times 100$
8	9	3.17 or 3.174 to 3.175	3	M2 for $\frac{63-61}{63} \times 100$ oe or $100 - \frac{61}{63} \times 100$ oe or M1 for $\frac{63-61}{63}$ oe or $\frac{61}{63} \times 100$
9	11	18 360	2	M1 for $34\,000 \times \left(1 - \frac{40}{100}\right) \times \left(1 - \frac{10}{100}\right)$ oe
10	5	18	2	M1 for $21.6 \div 1.2$ oe
11	5	96	2	M1 $72 / 0.75$ oe or M1 $0.75x = 72$ oe
12	6	25[.00]	3	M2 for $30 \times \frac{100}{120}$ oe or M1 for 30 associated with 120% e.g. $1.2x = 30$

13	11	460	3	M2 for $\frac{391 \times 100}{(100 - 15)}$ oe or M1 for recognising 391 as (100 – 15)% soi
14	14	2500 nfw	3	M2 for $2475 \div \left(1 - \frac{1}{100}\right)$ oe or M1 for 2475 associated with 99%
15	16	25	2	M1 for $x \times \left(1 + \frac{6}{100}\right) = 26.50$ oe or better
16	2	650	2	M1 $\frac{600}{2.4}$ ($\times 2.6$)
17	3	500	2	M1 for $600 \times 0.6 \div 0.72$ seen
18	19	(a) 20200 (b) 1260	2 2	M1 $65 \times 300 + 700$ M1 71190 / 56.5
19	15	36 cao	3	M1 1900/2.448 (= 776.14) A1 “776.(14...)” – 740 (= 36.14...)
20	7	1.14	2	M1 $3.38 \div 1.04$ (= 3.25) or M1 4.39×1.04
21	13	(a) 0.54 (b) 1.61	2 2	M1 for $\frac{2.7 \times 20000}{100000}$ oe or SC1 for figs 54 in answer SC1 for figs 161 or M1 200^2 or $20\ 000^2$ seen
22	5	(6)€ or euros (with correct working)	2	M1 one of 6×1.9037 or $11.5 \div 1.9037$ or $11.5 \div 6$ seen
23	12	$\frac{840 - x}{d}$ or $\frac{840}{d} - \frac{x}{d}$	3	M1 400×2.1 M1 “ 400×2.1 ” – x
24	19 (a)	32	2	B1 figs 32 or 1 cm to 2.5 km or 8 000 000 seen
	(b)	37.5	2	B1 (figs 25) ² seen or figs 375 in answer
25	1	112	2	M1 for $240 \div (7 + 8) \times 7$

26	12	225.(23112)	3	M2 for $(800 \div 3.8235 - 150) \times 3.8025$ M1 for $800 \div 3.8235$
27	13	68.5 www	3	M2 for $67.13 \div 0.98$ or M1 for 67.13 is 98%
28	1 (a)	9486000	1	
	(b)	9.486×10^6	1ft	
29	2	495.36	2	M1 for $700 \div 1.4131$
30	15 (a)	34.4	2	SC1 figs 344 seen
	(b)	300	2	SC1 figs 3 seen
31	13 (a)	15	2	M1 for $\frac{(9-3)}{0.4}$ oe
	(b)	11.7(0)	2	M1 for 9×1.3 oe
32	8	7 cao	3	B1 for 39.5(0) or 31.5(0) or 42 M1 for $(\text{their } 39.5 - 8) \div 4.5$ or $(\text{their } 42 - 10.5) \div 4.5$
33	7	16	2	M1 for $768 \div 48$
34	3	180	2	M1 for $\frac{300 \times 12}{20}$ oe
35	3	72	2	M1 for $84 \div 7$
36	13	175 cao final answer	3	B2 for 175.4 ... or M1 for $200 \div 1.14$
37	6	2.2[0...]	2	M1 for $11.99 \div 0.626$ soi by 19.2 or 19.15...
38	1	£ or pound[s] Correct working must be shown	2	M1 for $425 \div 1.14$ or 365×1.14
39	10	10.1[0]	3	M1 for 1.3199 and 1.3401 seen and M1 for 500×1.3199 or 500×1.3401 or for $500 \times (\text{their highest} - \text{their lowest})$ oe
40	6	1.6[0]	3	M1 for 800×1.5 and M1 for <i>their</i> $1200 \div 750$

41	3	1030	2	M1 for $1350 \div 1.313$
42	8	0.29 cao	3	M2 for $30 - (24 \times 1.2378)$ or $(24 \times 1.2378) - 30$ or M1 for 24×1.2378
43	7 (a)	700	2	M1 for 2800×0.325
	(b)	0.28	1	
44	1	2870	2	M1 for 350×8.2
45	1	168	2	M1 for $240 \div (7 + 3)$ or better
46	7	1.60 cao	3	B2 for 1.597.... or 1.6 or M1 for $2 \div 1.252$
47	4	628	2	M1 for $\frac{785}{1+4} [\times 4]$
48	3	694 or 694.4[4...]	2	M1 for $950 \div 1.368$
49	9	400 350 250	3	M1 for $\frac{1000}{8+7+5}$ implied by 50 A1 for one clearly assigned correct answer or SC2 for 3 correct answers in wrong order
50	5	393	2	B1 for 393.1 to 393.2 or M1 for $2000 \div 5.087$
51	3	[0].67	2	M1 for $14 \times 0.905 [-12]$ or 12.67 If zero scored, SC1 for answer [0].74[0]
52	12 (a)	38	2	M1 for $57 \div (2 + 1)$ or better
	(b)	12 : 7	2	M1FT for their 38 - 2 and their 19 + 2 seen dep on sum = 57 If M0 SC1 for answer 7 : 12