Ratio and proportion Answers

1)

(a) (i)	**8.4(0)**		**B2**	**B1** for 1.2 or 3.6 seen or **SC1** for figs 84 in answer
(ii)	$\dfrac{their(i)}{20}\times100$ oe **42** ft www2		**M1** **A1ft**	 ft their 8.4 × 5 After 0 scored **SC1** **ft** for 58% or $\dfrac{20-their(i)}{20}\times100$ correctly given
(b)	**6**		**B2**	**M1** for 9 or 8 ÷ (1 + 8 + 3) soi
(c)	$\dfrac{2.4}{2}\times3$ oe (= 3.6 seen) or their **(a) (i)** ÷ 7 × 3 $\dfrac{3}{12}\times9$ oe (= 2.25 seen) **1.6(0)** cao www3		**M1** **M1** **A1**	
(d)	$\dfrac{2.40}{1.25}$ oe **1.92** www2		**M1** **A1**	Implied by figs 192 **[11]**

2)

(i)	2 : 3		1	
(ii)	30 ÷ 2 × 3 o.e.		E1	Allow 2 : 3 (oe) = 30 : 45

3)

2.88		3	**M1** 40^3 oe seen **A1** 2 880 000 **B1ft** their 2 880 000 ÷ 100^3 or **B1** 0.000045 **M1** 40^3 **A1** cao or **M1** 0.4^3 **M1** 45×0.4^3 **A1**

4)

(a) 0.54		2	**M1** for $\dfrac{2.7\times20000}{100000}$ oe or **SC1** for figs 54 in answer
(b) 1.61		2	**SC1** for figs 161 or **M1** 200^2 or 20 000^2 seen

5)

(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

6)

(a) (i)	28 cao		2	**M1** for $\dfrac{350\times16}{200}$ oe or 350 ÷ 12.5 oe or 1.75 × 16 oe
(ii)	420		2ft	ft for *their* 28 ×15 **M1** for *their* 28 × $\dfrac{240}{16}$ or $\dfrac{350\times240}{200}$ oe or 1.75 × 240 oe

Ratio and proportion Answers

7)   13500   408 | **3** | **M1** 135×10^2 or $408000 \div 10^3$ oe **A1 A1**

8)   180 | **2** | **M1** for $\dfrac{300 \times 12}{20}$ oe

9)   30 000 | **3** | **M2** for $7500 \times 200^2/100^2$ oe or **M1** for 200^2 seen

10)   **(a) (i)**   5 | **2** | **M1** for $\dfrac{3 \times 15}{(5+3+1)}$

        (ii)   108 | **2** | **M1** for $60 \times \dfrac{9}{5}$ oe