

Ratio and Proportion – Answers

Ratio and Proportion 1

Direct Proportion

- 1) 3:2
- 2) 375:1
- 3) 1:200000
- 4) (a) (i) 2:5 (ii) 0.4:1 (iii) 1:2.5
(b) (i) 25000:1 (ii) 25000:1 (iii) 1: 0.00004
(c) (i) 8:3 (ii) $2\frac{2}{3} : 1$ (iii) 1:0.375
- 5) (a) £13.60 (b) 29.4m
- 6) (a) 285km (b) 18 litres
- 7) (a) 171 (b) 1.17kg
- 8) £125
- 9) (a) 1.3km (b) 54cm
- 10) (a) 400g (b) 390g (c) 60%
- 11) (a) £210 (b) 83.25cm (c) £192 (d) 16.4cm
- 12) (a) $\frac{7}{3}$ or $2\frac{1}{3}$ (b) $\frac{4}{9}$ (c) $\frac{7}{4}$ or $1\frac{3}{4}$ (d) $\frac{4}{7}$

Sharing in a given ratio

- 1) Ann £56, Belinda £40
- 2) TV £28000 Radio £17500 Magazines £10500
- 3) £8000
- 4) (a) £800 (b) £288 (c) £180 : £300
- 5) (a) Alan £90000, Mark £54000 (b) Alan £84000, Mark £60000 (c) 5 years
- 6) Tom is 18

Ratio and Proportion 2

- 1) (a) (i) 5.2kg (ii) 400cm (b) (i) 89.6km (ii) 12.5 litres (c) 15kg
- 2) (a) 240 days (b) 15 days (c) 30 painters
- 3) (i) 4.5km (ii) 30cm (iii) 200km²
- 4) (a) €111.94 (b) £53.60

Ratio – Inverse Proportion

- 1) (a) 60 days (b) 126 pickers
- 2) (a) 25 days (b) 150 chickens
- 3) (a) 8 days (b) 90 workers
- 4) (a) 140 secs (b) 40-speed
- 5) (a) 36mA (b) 63 ohms

Ratio and Proportion 3

- 1) 12cm
- 2) 1 litre
- 3) 32.8cm
- 4) 1.2 litres
- 5) (a) 5:9 (b) 1:9.375