

RAT 10



(R A T I O)

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Ratio : GCSE

Non - Calculator Throughout

Lesson 1

1.1 Cancelling Down Ratios

Ratios cancel down, or simplify, much like fractions do.

1.2 Examples

(i) $5 : 30$

(ii) $6 : 15$

(iii) $10 : 55$

(iv) $14 : 21$

(v) $23 : 46$

(vi) $2000 : 5000$

1.3 Exercise

Question 1

Cancel down the following ratios as far as possible by removing common factors

(i) $2 : 14$

(ii) $3 : 24$

(iii) $5 : 40$

(iv) $7 : 49$

(v) $50 : 500$

(vi) $4 : 10$

(vii) $6 : 33$

(viii) $10 : 15$

(ix) $4 : 20$

(x) $9 : 12$

(xi) $18 : 12$

(xii) $15 : 50$

Question 2

Cancel down the following ratios as far as possible by removing common factors

(i) 9 : 15

(ii) 12 : 14

(iii) 25 : 15

(iv) 12 : 18

(v) 200 : 300

(vi) 75 : 50

(vii) 45 : 36

(viii) 21 : 14

(ix) 8 : 12

(x) 20 : 16

(xi) 18 : 8

(xii) 13 : 39

Question 3

Cancel down the following ratios as far as possible by removing common factors

(i) $4 : 6 : 8$

(ii) $12 : 18 : 20$

(iii) $30 : 60 : 40$

(iv) $22 : 55 : 33$

(v) $2000 : 4000 : 6000$

(vi) $10 : 15 : 20$

(vii) $7 : 28 : 14$

(viii) $48 : 40 : 12$

(ix) $8 : 56 : 8$

(x) $360 : 90 : 180$

(xi) $55 : 15 : 25$

(xii) $16 : 40 : 88$

Question 4

Tommy receives a Birthday gift of £75.

He decides to split it between

Cinema Tickets : Sweets : Computer Games

in the ratio

7 : 8 : 10

(i) How much does Tommy spend on Cinema Tickets ?

(ii) How much does Tommy spend on Sweets ?

(iii) How much does Tommy spend on Computer Games ?

Question 5

George receives £500 in Christmas money.

He decides to split it between

Saving : iTunes : Cloths

in the ratio

3 : 2 : 5

(i) How much does George save ?

(ii) How much does George spend on iTunes ?

(iii) How much does George spend on Cloths ?