



Ratio Proportion and Unitary Method Ex 9.1 Q1

Answer :

(i) The ratio of the number of girls in the merit list of the board examination to the number of boys in that list is 2 : 1.

(ii) The ratio of the number of students passing mathematics test to the total number of students appeared is 2 : 3.

Ratio Proportion and Unitary Method Ex 9.1 Q2

Answer :

(i) The ratio of the number of bad pencils to that of good pencils produced in a factory is 1 : 9 means out of 10 or $(9 + 1)$ pencils, 9 pencils are good and 1 is bad.

(ii) In India, the number of villages is 2,000 times that of the cities.

Ratio Proportion and Unitary Method Ex 9.1 Q3

Answer :

(i) $60 : 72 = 5 : 6$ (dividing by 12)

(ii) $324 : 144 = 9 : 4$ (dividing by 36)

(iii) $85 : 391 = 5 : 23$ (dividing by 17)

(iv) $186 : 403 = 6 : 13$ (dividing by 31)

Ratio Proportion and Unitary Method Ex 9.1 Q4

Answer :

- (i) $\because \text{Rs. } 1 = 100 \text{ paise}$
 $\therefore 75 : 300 = 1 : 4$
- (ii) $35 : 45 = 7 : 9$
- (iii) $\because 1 \text{ kg} = 1000 \text{ gm}$
 $\therefore 8000 : 400 = 20 : 1$
- (iv) $\because 1 \text{ Hour} = 60 \text{ minute}$
 $\therefore 48 : 60 = 4 : 5$
- (v) $\because 1 \text{ meter} = 100 \text{ cm}$
 $\therefore 200 : 35 = 40 : 7$
- (vi) $\because 1 \text{ min} = 60 \text{ sec.}$
 $\therefore 35 \times 60 : 45 = 140 : 3$
- (vii) $\because 1 \text{ dozen} = 12$
 $\therefore 1 \text{ score} = 20$
or $3 \text{ score} = 3 \times 20 = 60$
 $\therefore 24 : 60 = 2 : 5.$
- (viii) $\because 1 \text{ week} = 7 \text{ days}$
 $\therefore 21 : 3 = 7 : 1$
- (ix) $\because 1 \text{ hour} = 60 \text{ minute}$
 $\therefore 2 \text{ hour } 40 \text{ min} = 2 \times 60 + 40 = 160$
 $\therefore 48 : 160 = 3 : 10$
- (x) $\because 1 \text{ meter} = 100 \text{ cm}$
 $\therefore 3 \text{ m } 5 \text{ cm} = 3 \times 100 + 5 = 305 \text{ cm}$
 $\therefore 305 : 35 = 61 : 7$

Ratio Proportion and Unitary Method Ex 9.1 Q5

Answer :

- (i) The ratio of 3.2 metres to 56 metres = $3.2 : 56 = 0.4 : 7 = 2 : 35$
- (ii) The ratio of 10 metres to 25 cm = $1000 : 25 = 40 : 1$
- (iii) The ratio of 25 paise to Rs 60 = $25 : 6000 = 1 : 240$
- (iv) The ratio of 10 litres to 0.25 litre = $10 : 0.25 = 40 : 1$

Ratio Proportion and Unitary Method Ex 9.1 Q6

Answer :

Ratio of the number of boys to that of the girls is $1168 : 1095 = 16 : 15$ (dividing by 73)

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