Name: Word Problems on Ratios

Chapter: Ratio and Proportion

Grade: ICSE Grade VIII

License: Non Commercial Use

- In a mixture of 247 litres, the ratio of milk and water is 12 : 7. How much water must be added to this mixture to make the ratio 156 : 121?
 - (i) 30 (ii) 29 (iii) 32 (iv) 31 (v) 28
- 2. The ratio of males to females in a committee of 50 members is 3 : 2. How many more ladies should be added to the committee so that the ratio of males to females is 1 : 3?
 - (i) 72 (ii) 71 (iii) 69 (iv) 68 (v) 70
- An employer reduces the number of employees in the ratio of 5:3 and increases their wages in the ratio 9:12.

 In what ratio, the wage bill is increased or decreased?
 - (i) 5:6 (ii) 5:4 (iii) 4:4 (iv) 5:1
- The work done by (x + 1) men in (3x + 2) days and work done by (x + 1) men in (5x + 1) days is in the ratio of 2 : 3 . Find the value of x
 - (i) 7 (ii) 4 (iii) 2 (iv) 3 (v) 5
- 5. A man reduces his weight in the ratio 16:12. What is his weight now, if originally he was 61 kg?
 - (i) $46 \, \text{kg}$ (ii) $\frac{183}{4} \, \text{kg}$ (iii) $\frac{187}{4} \, \text{kg}$ (iv) $\frac{191}{4} \, \text{kg}$ (v) $\frac{185}{4} \, \text{kg}$
- 6. A certain amount has been divided into two parts in the ratio 4 : 2. If the first part is 108, find the total amount.
 - (i) 162 (ii) 165 (iii) 161 (iv) 163 (v) 160
- 7. Divide $\stackrel{?}{=}$ 46800 into three parts such that the first one is $\frac{3}{2}$ of the second and ratio between second and the third is 4:3
 - (i) ₹21600.00:₹14400.00:₹10800.00 (ii) ₹14400.00:₹10800.00:₹21600.00
 - (iii) ₹21600.00:₹10800.00:₹14400.00 (iv) ₹21600.00:₹14400.00:₹14400.00
 - (v) ₹10800.00:₹21600.00:₹14400.00
- 8. Increase 477 in the ratio 9: 18
 - (i) 955 (ii) 952 (iii) 953 (iv) 954 (v) 957
- 9. Divide ₹54600 among A,B,C so that A shall receive $\frac{14}{25}$ of what B and C together recieve and B may receive $\frac{35}{43}$ of what A and C receive
 - (i) ₹19600.00:₹24500.00:₹24500.00 (ii) ₹19600.00:₹24500.00:₹10500.00
 - (iii) ₹24500.00:₹10500.00:₹19600.00 (iv) ₹10500.00:₹19600.00:₹24500.00
 - (v) ₹19600.00:₹10500.00:₹24500.00

10. A bag contains ₹1800 in the form of five-rupee, two-rupee and one-rupee coins in the ratio 17:8:19. Find the number of coins of each type

(i) 253, 125, 285 (ii) 255, 120, 285 (iii) 257, 115, 285 (iv) 256, 125, 280 (v) 254, 120, 290

In an examination, the ratio of passes to failures was 4:3.

11. Had 75 less appeared and 20 less passed, the ratio of passes to failures would have been 20:7. How many students appeared for the examination?

(i) 220 (ii) 215 (iii) 205 (iv) 200 (v) 210

12. What number must be added to each term of the ratio 48:160 to make it 23:30?

(i) 323 (ii) 319 (iii) 321 (iv) 317 (v) 320

13. A ratio is equal to 26:5. If its antecendent is 2730, what is its consequent?

(i) 527 (ii) 526 (iii) 522 (iv) 524 (v) 525

14. A ratio is equal to 63:4. If its consequent is 400, what is its antecendent?

(i) 6303 (ii) 6298 (iii) 6299 (iv) 6301 (v) 6300

Two numbers are in the ratio 12: 17. If 18 is added to each number, the ratio becomes 69: 94. Find the

(i) 144:204 (ii) 108:153 (iii) 120:170 (iv) 132:187 (v) 96:136

The ratio of two numbers is

numbers.

16. 2:3 and their LCM is 36. Find the numbers.

(i) 14:21 (ii) 8:12 (iii) 16:24 (iv) 12:18 (v) 10:15

17. If 2A = 4B = 5C, find A : B : C

(i) 11:5:4 (ii) 10:7:4 (iii) 10:2:4 (iv) 9:5:4 (v) 10:5:4

18. If $\frac{A}{5} = \frac{B}{8} = \frac{C}{4}$, find A : B : C

(i) 6:8:4 (ii) 5:8:4 (iii) 4:8:4 (iv) 5:6:4 (v) 5:11:4

19. If 6A = 5B and 3B = 4C, find A: C

(i) 10:6 (ii) 10:11 (iii) 11:9 (iv) 10:9 (v) 9:9

20. Divide 3225 in the ratio $\frac{7}{4}$: $\frac{2}{5}$

(i) 2625,603 (ii) 2625,600 (iii) 2626,600 (iv) 2625,597 (v) 2624,600

21. Divide 26571 in the ratio $\frac{4}{3} : \frac{8}{7} : \frac{5}{8}$

(i) 11424, 9789, 5355 (ii) 11424, 9794, 5355 (iii) 11424, 9792, 5355 (iv) 11423, 9792, 5355

(v) 11425, 9792, 5355

22. Two numbers are in the ratio 9: 4 and their difference is 115. Find the numbers.

(i) 206,92 (ii) 208,92 (iii) 207,90 (iv) 207,92 (v) 207,95

23. An office contains 792 employees of 4 types. The managers, team leaders, developers and testers are in the ratio 2:1:4:5. The number of managers in the office = (i) 133 (ii) 134 (iii) 131 (iv) 129 (v) 132
An office contains 56 managers, 392 team leaders, 112 developers and 392 testers. The ratio of all employees in the office = (i) 0:7:2:7 (ii) 2:7:2:7 (iii) 1:7:2:7 (iv) 1:4:2:7 (v) 1:9:2:7
25. An office contains 126 managers, 168 team leaders, 126 developers and 42 testers. The ratio of managers and team leaders = (i) 3:4 (ii) 4:4 (iii) 3:6 (iv) 2:4 (v) 3:2
An office contains 264 managers, 462 team leaders, 66 developers and 330 testers. The ratio of managers to the total employees = (i) 4:19 (ii) 3:17 (iii) 5:17 (iv) 4:15
A box contains 492 fruits of 3 types. The mangoes, apples, and oranges are in the ratio 2 : 6 : 4. The number of mangoes in the box = (i) 79 (ii) 82 (iii) 81 (iv) 83 (v) 84
28. A box contains 44 mangoes, 77 apples and 33 oranges. The ratio of all fruits in the box = (i) 4:7:3 (ii) 3:7:3 (iii) 4:10:3 (iv) 5:7:3 (v) 4:4:3
29. A box contains 188 mangoes, 329 apples and 235 oranges. The ratio of mangoes and apples = (i) 5:7 (ii) 4:4 (iii) 4:10 (iv) 3:7 (v) 4:7
30. A box contains 183 mangoes, 61 apples and 366 oranges. The ratio of mangoes to the total fruits = (i) 3:10 (ii) 3:13 (iii) 4:10 (iv) 2:10 (v) 3:8
31. A box contains 15 pens and 90 pencils. The ratio of all stationary items in the box = (i) 0:6 (ii) 1:3 (iii) 1:6 (iv) 1:8 (v) 2:6
32. A box contains 300 pens and 180 pencils. The ratio of pens to the total stationary items = (i) 4:8 (ii) 5:6 (iii) 5:8 (iv) 6:8 (v) 5:11
33. A box contains 294 pens and 245 pencils. The ratio of pencils to the total stationary items = (i) 6:11 (ii) 4:11 (iii) 5:11 (iv) 5:9 (v) 5:14

		А	ssignment Key		
1) (i)	2) (v)	3) (ii)	4) (ii)	5) (ii)	6) (i)
7) (i)	8) (iv)	9) (ii)	10) (ii)	11) (v)	12) (v)
13) (v)	14) (v)	15) (iii)	16) (iv)	17) (v)	18) (ii)
19) (iv)	20) (ii)	21) (iii)	22) (iv)	23) (v)	24) (iii)
25) (i)	26) (iv)	27) (ii)	28) (i)	29) (v)	30) (i)
31) (iii)	32) (iii)	33) (iii)			

Copyright © Small Systems Computing Pvt. Ltd.