

EduSahara™ Learning Center Assignment

Grade : Class VIII, ICSE
Chapter : Ratio and Proportion
Name : Word Problems on Ratios
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1. In a mixture of 594 litres, the ratio of milk and water is 20 : 13 .
How much water must be added to this mixture to make the ratio 60 : 47 ?
(i) 47 (ii) 50 (iii) 49 (iv) 48 (v) 45
-

- The ratio of males to females in a committee of 180 members is 5 : 4 .
2. How many more ladies be added to the committee
so that the ratio of males to females is 5 : 7 ?
(i) 62 (ii) 59 (iii) 58 (iv) 61 (v) 60
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- An employer reduces the number of employees in the ratio of 7 : 5
3. and increases their wages in the ratio 2 : 3 .
In what ratio, the wage bill is increased or decreased?
(i) 14 : 15 (ii) 14 : 13 (iii) 13 : 15 (iv) 14 : 17
-

4. The work done by $(2x + 1)$ men in $(19x + 1)$ days and work done by $(10x + 1)$ men in $(3x + 1)$ days is in the ratio of 65 : 49 . Find the value of x
(i) 3 (ii) 4 (iii) 0 (iv) 2 (v) 1
-

5. A man reduces his weight in the ratio 20 : 11 .
What is his weight now, if originally he was 52 kg ?
(i) $\frac{144}{5}$ kg (ii) $\frac{143}{5}$ kg (iii) 29 kg (iv) $\frac{153}{5}$ kg (v) $\frac{148}{5}$ kg
-

- A certain amount has been divided into two parts in the ratio 8 : 2 .
6. If the first part is 216 , find the total amount
(i) 269 (ii) 270 (iii) 268 (iv) 272 (v) 271
-

- Divide ₹36500 into three parts
7. such that the first one is $\frac{2}{5}$ of the second
and ratio between second and the third is 9 : 2
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- (i) ₹ 5000.00 : ₹ 9000.00 : ₹ 22500.00
 - (ii) ₹ 9000.00 : ₹ 22500.00 : ₹ 22500.00
 - (iii) ₹ 22500.00 : ₹ 5000.00 : ₹ 9000.00
 - (iv) ₹ 9000.00 : ₹ 22500.00 : ₹ 5000.00
 - (v) ₹ 9000.00 : ₹ 5000.00 : ₹ 22500.00
-

8. Increase 550 in the ratio 10 : 12

- (i) 661 (ii) 662 (iii) 658 (iv) 660 (v) 659
-

Divide ₹18800 among A,B,C so that

9. A shall receive $\frac{2}{45}$ of what B and C together receive
and B may receive $\frac{9}{38}$ of what A and C receive

- (i) ₹ 800.00 : ₹ 3600.00 : ₹ 3600.00
 - (ii) ₹ 3600.00 : ₹ 14400.00 : ₹ 800.00
 - (iii) ₹ 800.00 : ₹ 3600.00 : ₹ 14400.00
 - (iv) ₹ 800.00 : ₹ 14400.00 : ₹ 3600.00
 - (v) ₹ 14400.00 : ₹ 800.00 : ₹ 3600.00
-

A bag contains ₹848 in the form of

10. five-rupee, two-rupee and one-rupee coins in the ratio 17 : 5 : 11 .

Find the number of coins of each type

- (i) 134 , 45 , 88 (ii) 137 , 45 , 83 (iii) 136 , 40 , 88
(iv) 135 , 40 , 93 (v) 138 , 35 , 88
-

In an examination, the ratio of passes to failures was 7 : 4.

11. Had 90 less appeared and 10 less passed, the ratio of passes to failures would have been 5 : 1.

How many students appeared for the examination?

- (i) 330 (ii) 335 (iii) 325 (iv) 340 (v) 320
-

12. What number must be added to each term of the ratio

272 : 304 to make it 31 : 33 ?

- (i) 224 (ii) 222 (iii) 225 (iv) 226 (v) 223
-

13. A ratio is equal to 33 : 5 . If its antecedent is 4851 , what is its consequent?

- (i) 734 (ii) 732 (iii) 737 (iv) 735 (v) 736
-

14. A ratio is equal to 17 : 5 . If its consequent is 350 , what is its antecedent?

- (i) 1189 (ii) 1187 (iii) 1191 (iv) 1190 (v) 1192
-

15. Two numbers are in the ratio 13 : 14 . If 18 is added to each number, the ratio becomes 61 : 65 . Find the numbers

- (i) 104 : 112 (ii) 91 : 98 (iii) 78 : 84
(iv) 130 : 140 (v) 117 : 126
-

16. The ratio of two numbers is 2 : 3 and their LCM is 54 . Find the numbers ?

- (i) 22 : 33 (ii) 20 : 30 (iii) 18 : 27 (iv) 14 : 21 (v) 16 : 24
-

17. If $3A = 7B = 8C$, find A : B : C

- (i) 57 : 24 : 21 (ii) 56 : 24 : 21 (iii) 55 : 24 : 21
(iv) 56 : 21 : 21 (v) 56 : 27 : 21
-

18. If $\frac{A}{2} = \frac{B}{7} = \frac{C}{6}$, find A : B : C

- (i) 2 : 7 : 6 (ii) 3 : 7 : 6 (iii) 1 : 7 : 6 (iv) 2 : 10 : 6 (v) 2 : 4 : 6
-

19. If $8A = 7B$ and $2B = 6C$, find A : C

- (i) 20 : 8 (ii) 22 : 8 (iii) 21 : 8 (iv) 21 : 6 (v) 21 : 11
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20. Divide 2108 in the ratio $\frac{3}{4} : \frac{1}{9}$

- (i) 1837 , 272 (ii) 1836 , 269 (iii) 1836 , 275
(iv) 1836 , 272 (v) 1835 , 272

21. Divide 7176 in the ratio $\frac{7}{6} : \frac{1}{6} : \frac{6}{7}$

- (i) 3822 , 548 , 2808
 - (ii) 3821 , 546 , 2808
 - (iii) 3823 , 546 , 2808
 - (iv) 3822 , 546 , 2808
 - (v) 3822 , 544 , 2808
-

22. Two numbers are in the ratio 3 : 2 and their difference is 28 . Find the numbers

- (i) 83,56 (ii) 84,59 (iii) 85,56 (iv) 84,53 (v) 84,56
-

23. An office contains 874 employees of 4 types. The managers, team leaders, developers and testers are in the ratio 7 : 2 : 6 : 4. The number of managers in the office =

- (i) 322 (ii) 319 (iii) 324 (iv) 323 (v) 321
-

24. An office contains 75 managers, 175 team leaders, 75 developers and 175 testers. The ratio of all employees in the office =

- (i) 3 : 7 : 3 : 7 (ii) 3 : 10 : 3 : 7 (iii) 3 : 4 : 3 : 7
 - (iv) 4 : 7 : 3 : 7 (v) 2 : 7 : 3 : 7
-

25. An office contains 48 managers, 72 team leaders, 48 developers and 168 testers. The ratio of managers and team leaders =

- (i) 2 : 1 (ii) 2 : 6 (iii) 2 : 3
 - (iv) 1 : 3 (v) 3 : 3
-

26. An office contains 27 managers, 189 team leaders, 162 developers and 135 testers. The ratio of managers to the total employees =

- (i) 1 : 17 (ii) 1 : 19 (iii) 0 : 19
 - (iv) 2 : 19 (v) 1 : 21
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27. A box contains 715 fruits of 3 types. The mangoes, apples, and oranges are in the ratio 6 : 3 : 4. The number of mangoes in the box =

- (i) 328 (ii) 333 (iii) 331 (iv) 330 (v) 329
-

28. A box contains 140 mangoes, 56 apples and 112 oranges. The ratio of all fruits in the box =

(i) 5 : 5 : 4 (ii) 6 : 2 : 4 (iii) 5 : 0 : 4 (iv) 4 : 2 : 4 (v) 5 : 2 : 4

29. A box contains 102 mangoes, 17 apples and 51 oranges. The ratio of mangoes and apples =

(i) 6 : -2 (ii) 6 : 1 (iii) 5 : 1 (iv) 6 : 4 (v) 7 : 1

30. A box contains 30 mangoes, 90 apples and 120 oranges. The ratio of mangoes to the total fruits =

(i) 2 : 8 (ii) 1 : 6 (iii) 1 : 11 (iv) 0 : 8 (v) 1 : 8

31. A box contains 110 pens and 154 pencils. The ratio of all stationary items in the box =

(i) 5 : 5 (ii) 4 : 7 (iii) 5 : 7 (iv) 5 : 10 (v) 6 : 7

32. A box contains 186 pens and 155 pencils. The ratio of pens to the total stationary items =

(i) 7 : 11 (ii) 6 : 14 (iii) 6 : 8 (iv) 6 : 11 (v) 5 : 11

33. A box contains 183 pens and 366 pencils. The ratio of pencils to the total stationary items =

(i) 3 : 3 (ii) 2 : 6 (iii) 1 : 3 (iv) 2 : 3 (v) 2 : 1

Assignment Key

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