EduSahara™ Learning Center Assignment

Grade   : **Class VII, SSC**
Chapter   : **Ratio – Applications**
Name   : **Ratios – Word Problems**
Licensed To : Teachers and Students for non–commercial use

1. An office contains 285 employees of 4 types. The managers, team leaders, developers and testers are in the ratio 6 : 3 : 4 : 2. The number of team leaders in the office =

   (i) 54 (ii) 56 (iii) 58 (iv) 60 (v) 57

2. An office contains 104 employees of 4 types. The managers, team leaders, developers and testers are in the ratio 3 : 2 : 1 : 2. The number of developers in the office =

   (i) 14 (ii) 12 (iii) 13 (iv) 10 (v) 15

3. An office contains 102 managers, 68 team leaders, 51 developers and 17 testers. The ratio of all employees in the office =

   (i)   6 : 2 : 3 : 1   (ii)   5 : 4 : 3 : 1   (iii)   6 : 6 : 3 : 1

   (iv) 6 : 4 : 3 : 1   (v)   7 : 4 : 3 : 1

4. An office contains 246 managers, 205 team leaders, 164 developers and 205 testers. The ratio of managers and team leaders =

   (i)   6 : 3   (ii)   5 : 5   (iii)   6 : 7

   (iv) 6 : 5   (v)   7 : 5

5. An office contains 36 managers, 12 team leaders, 36 developers and 48 testers. The ratio of managers and developers =

   (i)   1 : 3   (ii)   1 : 1   (iii)   1 : -1

   (iv) 0 : 1   (v)   2 : 1

6. An office contains 360 managers, 300 team leaders, 240 developers and 120 testers. The ratio of managers to the total employees =

   (i)   5 : 17   (ii)   6 : 19   (iii)   6 : 17

   (iv) 7 : 17   (v)   6 : 14

7. An office contains 38 managers, 95 team leaders, 57 developers and 76 testers. The ratio of developers to the total employees =

   (i)   4 : 14   (ii)   3 : 17   (iii)   3 : 11

(iv) 2 : 14 (v) 3 : 14

---

8. An office contains 154 employees of 4 types. There are 28 managers and 70 team leaders. The developers and testers are in the ratio 1 : 3. The number of developers in the office =

(i) 14 (ii) 15 (iii) 12 (iv) 16 (v) 13

---

9. An office contains 816 employees of 4 types. There are 204 managers and 68 team leaders. The developers and testers are in the ratio 3 : 5. The number of testers in the office =

(i) 340 (ii) 337 (iii) 339 (iv) 341 (v) 342

---

10. An office contains 418 employees. There are 132 managers, 66 team leaders and 88 developers. The number of testers in the office =

(i) 129 (ii) 134 (iii) 133 (iv) 132 (v) 131

---

11. A box contains 340 fruits of 3 types. The mangoes, apples, and oranges are in the ratio 2 : 6 : 2. The number of mangoes in the box =

(i) 68 (ii) 69 (iii) 67 (iv) 71 (v) 65

---

12. A box contains 372 fruits of 3 types. The mangoes, apples, and oranges are in the ratio 3 : 7 : 2. The number of apples in the box =

(i) 218 (ii) 217 (iii) 214 (iv) 219 (v) 216

---

13. A box contains 308 fruits of 3 types. The mangoes, apples, and oranges are in the ratio 7 : 3 : 4. The number of oranges in the box =

(i) 89 (ii) 87 (iii) 90 (iv) 88 (v) 86

---

14. A box contains 126 mangoes, 84 apples and 126 oranges. The ratio of all fruits in the box =

(i) 3 : -1 : 3 (ii) 4 : 2 : 3 (iii) 3 : 2 : 3 (iv) 2 : 2 : 3 (v) 3 : 5 : 3

---

15. A box contains 301 mangoes, 215 apples and 301 oranges. The ratio of mangoes and apples =

(i) 7 : 3 (ii) 7 : 5 (iii) 8 : 5 (iv) 6 : 5 (v) 7 : 8

---

16. A box contains 120 mangoes, 180 apples and 120 oranges. The ratio of mangoes to the total fruits =

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

---

17. A box contains 50 mangoes, 30 apples and 50 oranges. The ratio of apples to the total fruits =

(i) 3 : 16 (ii) 2 : 13 (iii) 4 : 13 (iv) 3 : 10 (v) 3 : 13

---

18. A box contains 594 fruits of 3 types. There are 216 mangoes and 324 apples. The number of oranges in the box =

   (i) 55 (ii) 54 (iii) 57 (iv) 52 (v) 53

---

19. A box contains 414 stationary items of 2 types. The pens and pencils are in the ratio 4 : 2. The number of pens in the box =

   (i) 275 (ii) 277 (iii) 276 (iv) 279 (v) 273

---

20. A box contains 300 stationary items of 2 types. The pens and pencils are in the ratio 5 : 7. The number of pencils in the box =

   (i) 174 (ii) 176 (iii) 173 (iv) 175 (v) 178

---

21. A box contains 69 pens and 138 pencils. The ratio of all stationary items in the box =

   (i) 2 : 2 (ii) 1 : 2 (iii) 0 : 2 (iv) 1 : 5 (v) 1 : -1

---

22. A box contains 44 pens and 22 pencils. The ratio of pens to the total stationary items =

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

---

23. A box contains 21 pens and 63 pencils. The ratio of pencils to the total stationary items =

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

---

24. Find the number which bears the same ratio to $\frac{3}{4}$ that $\frac{5}{7}$ does to $\frac{5}{8}$

   (i) $\frac{6}{7}$ (ii) $\frac{4}{7}$ (iii) $\frac{8}{7}$ (iv) $\frac{2}{3}$ (v) $\frac{6}{5}$

---

25. The ages of A and B are in the ratio 4 : 5. 6 years hence, their ages will be in the ratio 9 : 11. Find their present ages

   (i) 56 : 70 (ii) 40 : 50 (iii) 48 : 60 (iv) 44 : 55

---

26. The ages of A and B are in the ratio 2 : 1. 9 years ago, their ages were in the ratio 9 : 4. Find their present ages

   (i) 90 : 45 (ii) 94 : 47 (iii) 86 : 43 (iv) 88 : 44

---

27. A certain amount has been divided into two parts in the ratio 8 : 9 .

   If the first part is 240 , find the total amount

   (i) 513 (ii) 508 (iii) 511 (iv) 509 (v) 510

---

28. A bag contains ₹825 in the form of

five-rupee, two-rupee and one-rupee coins in the ratio 8 : 6 : 3 .

Find the number of coins of each type

(i)   121 , 95 , 40 (ii) 122 , 85 , 45 (iii) 119 , 90 , 50

(iv) 120 , 90 , 45 (v) 118 , 95 , 45

---

29. The sides of a triangle are in the ratio $\frac{1}{4} : \frac{1}{9} : \frac{1}{5}$ and its perimeter is 1717 cm .

Find the lengths of the sides of the triangle

(i)   765 cm : 340 cm : 612 cm (ii)   760 cm : 340 cm : 617 cm

(iii) 770 cm : 340 cm : 607 cm (iv)   760 cm : 345 cm : 612 cm

(v)   770 cm : 335 cm : 612 cm

Assignment Key

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