EduSahara™ Assignment

Name : Ratio Concepts

Chapter : Ratio

Grade : ICSE Grade X

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1. The ratio equivalent of the fraction $\frac{1}{8}$ =

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

2. The ratio equivalent of the fraction $\frac{81}{47}$ =

   (i) 81:47 (ii) 81:44 (iii) 81:50 (iv) 47:81 (v) 80:47

3. The fraction equivalent of the ratio 10:6 =

   (i) $\frac{5}{2}$ (ii) 2 (iii) $\frac{10}{6}$ (iv) $\frac{4}{3}$ (v) $\frac{6}{10}$

4. The fraction equivalent of the ratio 72:44 =

   (i) $\frac{12}{7}$ (ii) $\frac{72}{44}$ (iii) $\frac{35}{22}$ (iv) $\frac{37}{22}$ (v) $\frac{44}{72}$

5. The inverse ratio of 17:28 =

   (i) 28:17 (ii) 27:17 (iii) 153:252 (iv) 17:26 (v) 17:31

6. The antecendent in the ratio 9:20 =

   (i) 18 (ii) 9 (iii) 20 (iv) 11 (v) 8

7. The antecendent in the ratio $\frac{13}{2} : \frac{9}{2}$ =

   (i) $\frac{13}{2}$ (ii) $\frac{15}{2}$ (iii) $\frac{7}{2}$ (iv) $\frac{9}{2}$ (v) 13

8. The consequent in the ratio 12:9 =

   (i) 10 (ii) 9 (iii) 12 (iv) 8

9. The consequent in the ratio $\frac{2}{11} : \frac{11}{10}$ =

   (i) $\frac{11}{10}$ (ii) $\frac{2}{11}$ (iii) 0 (iv) $\frac{11}{8}$ (v) $\frac{13}{10}$

10. The simplest form of 165:135 =

    (i) 12:9 (ii) 11:9 (iii) 10:9 (iv) 165:137 (v) 11:6

11. If a : b = 10:17 and b : c = 2:5 , then a : b : c =

    (i) 21:34:85 (ii) 20:32:85 (iii) 20:37:85 (iv) 20:34:85 (v) 19:34:85

12. If $a : b = 6:14$ and $b : c = 17:35$, then $a : b : c =$

(i) $101:238:490$ (ii) $103:238:490$ (iii) $102:235:490$ (iv) $102:238:490$ (v) $102:240:490$

13. If $a : b = \frac{1}{2} : \frac{3}{10}$ and $b : c = \frac{1}{4} : \frac{17}{19}$, then $a : b : c =$

(i) $\frac{1}{10} : \frac{3}{40} : \frac{51}{190}$ (ii) $\frac{1}{8} : \frac{1}{8} : \frac{51}{190}$ (iii) $\frac{1}{8} : \frac{1}{40} : \frac{51}{190}$ (iv) $\frac{1}{6} : \frac{3}{40} : \frac{51}{190}$ (v) $\frac{1}{8} : \frac{3}{40} : \frac{51}{190}$

14. If $a : b = \frac{12}{20} : \frac{15}{28}$ and $b : c = \frac{21}{23} : \frac{2}{17}$, then $a : b : c =$

(i) $\frac{63}{115} : \frac{45}{92} : \frac{15}{238}$ (ii) $\frac{7}{13} : \frac{45}{92} : \frac{15}{238}$ (iii) $\frac{63}{115} : \frac{43}{92} : \frac{15}{238}$ (iv) $\frac{63}{115} : \frac{47}{92} : \frac{15}{238}$ (v) $\frac{63}{113} : \frac{45}{92} : \frac{15}{238}$

15. Find the missing value in the equation $____ : 2 = 28 : 7$

(i) 8 (ii) 5 (iii) 7 (iv) 11 (v) 9

16. Find the missing value in the equation $38 : ____ = 228 : 6$

(i) 2 (ii) 3 (iii) 1 (iv) (-2) (v) 0

17. Find the missing value in the equation $18 : 3 = ____ : 5$

(i) 27 (ii) 29 (iii) 31 (iv) 32 (v) 30

18. Find the missing value in the equation $36 : 9 = 24 : ____$

(i) 4 (ii) 7 (iii) 5 (iv) 6 (v) 9

19. Divide 1078 in the ratio 16 : 6

(i) 784 , 296 (ii) 783 , 294 (iii) 784 , 292 (iv) 784 , 294 (v) 785 , 294

20. Divide 21987 in the ratio 39 : 24

(i) 13611 , 8374 (ii) 13612 , 8376 (iii) 13611 , 8376 (iv) 13611 , 8378 (v) 13610 , 8376

21. Divide 6240 in the ratio 11 : 19 : 9

(i) 1760 , 3043 , 1440 (ii) 1761 , 3040 , 1440 (iii) 1759 , 3040 , 1440 (iv) 1760 , 3037 , 1440

(v) 1760 , 3040 , 1440

22. Divide 5670 in the ratio 21 : 22 : 11

(i) 2206 , 2310 , 1155 (ii) 2205 , 2312 , 1155 (iii) 2204 , 2310 , 1155 (iv) 2205 , 2310 , 1155

(v) 2205 , 2307 , 1155

23. Divide 4599 in the ratio 20 : 15 : 8 : 20

(i) 1460 , 1095 , 584 , 1460 (ii) 1459 , 1095 , 584 , 1460 (iii) 1460 , 1092 , 584 , 1460

(iv) 1461 , 1095 , 584 , 1460 (v) 1460 , 1097 , 584 , 1460

24. Divide 12150 in the ratio 20 : 17 : 13 : 40

(i) 2700 , 2298 , 1755 , 5400 (ii) 2700 , 2295 , 1755 , 5400 (iii) 2701 , 2295 , 1755 , 5400

(iv) 2699 , 2295 , 1755 , 5400 (v) 2700 , 2293 , 1755 , 5400

25. A ratio is equal to 35 : 9. If its antecendent is 2100, what is its consequent?

(i) 537 (ii) 540 (iii) 542 (iv) 539 (v) 541

26. A ratio is equal to 2 : 1. If its consequent is 2975, what is its antecendent?

(i) 5951 (ii) 5950 (iii) 5953 (iv) 5949 (v) 5947

27. Find the ratio between 4 months and 6 years 4 months

(i) 0:19 (ii) 1:22 (iii) 1:19 (iv) 1:17

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

(i) 1 (ii) $\frac{7}{8}$ (iii) $\frac{3}{4}$ (iv) $\frac{7}{9}$

29. The ascending order of $2:8, 6:7, 4:5, 2:5, 2:7, 7:8$ is

(i) $2:8, 6:7, 2:5, 2:7, 4:5, 7:8$ (ii) $2:8, 2:7, 2:5, 4:5, 6:7, 7:8$ (iii) $2:8, 2:5, 2:7, 4:5, 6:7, 7:8$

(iv) $4:5, 2:5, 6:7, 2:8, 7:8, 2:7$ (v) $2:5, 4:5, 2:7, 6:7, 2:8, 7:8$

30. Divide 1044 in the ratio $\frac{1}{3} : \frac{9}{2}$

(i) 72 , 972 (ii) 73 , 972 (iii) 71 , 972 (iv) 72 , 970 (v) 72 , 975

31. Divide 1770 in the ratio $\frac{2}{3} : \frac{5}{3} : \frac{1}{8}$

(i) 480 , 1200 , 90 (ii) 480 , 1197 , 90 (iii) 480 , 1202 , 90 (iv) 479 , 1200 , 90 (v) 481 , 1200 , 90

32. Which of the following is true?

(i) $9:2 < 8:5$ (ii) $9:4 < 6:5$ (iii) $8:7 < 9:4$ (iv) $5:2 < 3:2$ (v) $5:3 < 6:5$

33. Find the ratio between 9 months and 6 years

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

34. Find the ratio between 54 min and 44 hr

(i) 9:437 (ii) 9:440 (iii) 8:440 (iv) 9:443

35. Find the ratio between 3 m and 3 km

(i) 1:998 (ii) 1:1000 (iii) 0:1000 (iv) 1:1003

36. Find the ratio between 9 gm and 10 kg

(i) 9:10000 (ii) 9:9998 (iii) 8:10000 (iv) 9:10003

37. Find the ratio between 6 l and 3 kl

(i) 1:497 (ii) 1:502 (iii) 1:500 (iv) 0:500

38. Find the ratio between 4 hr and 16 days

(i) 0:96 (ii) 1:93 (iii) 1:99 (iv) 1:96

39. Find the product of extremes of $7:6$ and $19:12$

(i) 86 (ii) 114 (iii) 82 (iv) 84 (v) 83

40. Find the product of extremes of $\frac{19}{12}:\frac{5}{17}$ and $\frac{9}{20}:\frac{10}{17}$

(i) $\frac{95}{102}$ (ii) $\frac{19}{20}$ (iii) $\frac{97}{102}$ (iv) $\frac{9}{68}$ (v) $\frac{31}{34}$

41. Find the product of means of $18:9$ and $7:5$

(i) 62 (ii) 90 (iii) 63 (iv) 65 (v) 60

42. Find the product of means of $\frac{11}{3}:\frac{18}{11}$ and $\frac{19}{5}:\frac{15}{13}$

(i) $\frac{68}{11}$ (ii) $\frac{344}{55}$ (iii) $\frac{55}{13}$ (iv) $\frac{342}{53}$ (v) $\frac{342}{55}$

43. Find the mean proportional of 75 and 3

(i) 225 (ii) 3 (iii) 15 (iv) 13 (v) 75

44. Find the third proportional of 32 and 8

(i) 0 (ii) 8 (iii) 64 (iv) 32 (v) 2

45. Find the fourth proportional of $16, 4$ and 28

(i) 28 (ii) 4 (iii) 7 (iv) 5 (v) 9

46. Which of the ratios is proportional to 42 : 7?

(i) $19:3$ (ii) $18:6$ (iii) $17:3$ (iv) $18:0$ (v) $18:3$

47. The ratio 3 : 2 is proportional to which of the following ratios?

(i) $18:12$ (ii) $15:8$ (iii) $12:10$ (iv) $6:6$ (v) $9:4$

Assignment Key

1) (v)	2) (i)	3) (iii)	4) (ii)	5) (i)	6) (ii)
7) (i)	8) (ii)	9) (i)	10) (ii)	11) (iv)	12) (iv)
13) (v)	14) (i)	15) (i)	16) (iii)	17) (v)	18) (iv)
19) (iv)	20) (iii)	21) (v)	22) (iv)	23) (i)	24) (ii)
25) (ii)	26) (ii)	27) (iii)	28) (ii)	29) (ii)	30) (i)
31) (i)	32) (iii)	33) (iii)	34) (ii)	35) (ii)	36) (i)
37) (iii)	38) (iv)	39) (iv)	40) (i)	41) (iii)	42) (v)
43) (iii)	44) (v)	45) (iii)	46) (v)	47) (i)	

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