EduSahara™ Assignment

Name : Proportion Concepts

Chapter : Ratio and Proportion

Grade : ICSE Grade VII

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1. Find the missing value in the equation $___ : 9 = 18 : 3$

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

2. Find the missing value in the equation $12 : ___ = 20 : 5$

   (i) 3 (ii) 2 (iii) 4 (iv) 0 (v) 6

3. Find the missing value in the equation $3 : 1 = ___ : 5$

   (i) 18 (ii) 16 (iii) 14 (iv) 15 (v) 13

4. Find the missing value in the equation $14 : 1 = 126 : ___$

   (i) 7 (ii) 10 (iii) 8 (iv) 9 (v) 12

5. Find the product of extremes of $14 : 12$ and $17 : 10$

   (i) 143 (ii) 204 (iii) 140 (iv) 137 (v) 139

6. Find the product of extremes of $\frac{7}{6} : \frac{4}{13}$ and $\frac{4}{15} : \frac{1}{8}$

   (i) $\frac{3}{16}$ (ii) $\frac{5}{48}$ (iii) $\frac{7}{46}$ (iv) $\frac{7}{48}$ (v) $\frac{16}{195}$

7. Find the product of means of $16 : 14$ and $9 : 19$

   (i) 125 (ii) 126 (iii) 124 (iv) 128 (v) 304

8. Find the product of means of $\frac{8}{15} : \frac{13}{18}$ and $\frac{17}{4} : \frac{4}{9}$

   (i) $\frac{221}{72}$ (ii) $\frac{221}{70}$ (iii) $\frac{223}{72}$ (iv) $\frac{73}{24}$ (v) $\frac{32}{135}$

9. Find the mean proportional of 18 and 2

   (i) 2 (ii) 6 (iii) 36 (iv) 3 (v) 18

10. Find the third proportional of 98 and 14

    (i) 2 (ii) 196 (iii) 98 (iv) 0 (v) 14

11. Find the fourth proportional of $54, 9$ and 18

    (i) 1 (ii) 6 (iii) 9 (iv) 3 (v) 18

12. Which of the ratios is proportional to 32 : 8?

    (i) $28 : 5$ (ii) $29 : 7$ (iii) $28 : 10$ (iv) $27 : 7$ (v) $28 : 7$

13. Find the mean proportional of 27 and 3

    (i) 27 (ii) 81 (iii) 9 (iv) 7 (v) 3

14. Find the third proportional of 98 and 14

(i) 196 (ii) 2 (iii) 98 (iv) 0 (v) 14

15. Find the fourth proportional of 30, 5 and 18

(i) 5 (ii) 3 (iii) 1 (iv) 18

16. Which of the ratios is proportional to 20 : 5?

(i) 31:8 (ii) 32:6 (iii) 32:8 (iv) 33:8 (v) 32:10

17. If $a:b::c:d$, then

(i) $ac = bd$ (ii) $ad = bc$ (iii) $ab = cd$ (iv) $abc = bcd$

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

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

19. Which of the following represents a proportion ?

(i) 30:38::120:114 (ii) 32:40::128:160 (iii) 31:39::93:156 (iv) 33:41::66:123 (v) 34:42::102:84

20. Which of the following does not represent a proportion ?

(i) 10:14::30:42 (ii) 18:24::36:48 (iii) 4:6::8:18 (iv) 9:15::36:60 (v) 8:16::40:80

21. If $a:b::c:d$, then 'a' is called

(i) second term (ii) third proportional (iii) mean proportional (iv) fourth proportional (v) extreme

22. If $a:b::b:c$, then 'b' is called

(i) first term (ii) mean proportional (iii) fourth proportional (iv) extreme (v) third proportional

23. If $a:b::b:c$, then 'c' is called

(i) mean proportional (ii) third proportional (iii) second term (iv) first term

24. If $a:b::b:c$, then the mean proportional is

(i) c (ii) ac (iii) bc (iv) a (v) b

25. If a,b,c,d,e,f are in continued proportion, then which of the following is true?

(i) $\frac{a}{b}=\frac{c}{d}=\frac{e}{f}$ (ii) $\frac{a}{b}=\frac{b}{c}=\frac{c}{d}$ (iii) $\frac{ab}{bc}=\frac{bc}{cd}=\frac{cd}{de}$ (iv) $ab=bc=cd=de$

26. If $36:x::18:15$, find 'x'

(i) 31 (ii) 30 (iii) 27 (iv) 29 (v) 33

27. Find the fourth proportional of 24, 20, 36

(i) 28 (ii) 31 (iii) 32 (iv) 30 (v) 29

28. Find the third proportional of 100 and 10

(i) 2 (ii) 1 (iii) (-1) (iv) 0 (v) 4

29. Find the mean proportional of 9 and 81

(i) 28 (ii) 24 (iii) 30 (iv) 26 (v) 27

30. If $6, x, 24$ are in continued proportion, find x

(i) 15 (ii) 11 (iii) 9 (iv) 13 (v) 12

31. Find the mean proportional between 2.7 and 10.8

(i) 7.4 (ii) 3.4 (iii) 4.4 (iv) 5.4 (v) 6.4

32. Find the mean proportional between $\sqrt{2}$ and $8\sqrt{2}$

(i) 7 (ii) 3 (iii) 4 (iv) 5 (v) 1

33. Find two numbers whose mean proportional is 10 and third proportional is $\frac{625}{4}$

(i) 5 and 25 (ii) 6 and 25 (iii) 4 and 23 (iv) 4 and 25 (v) 4 and 24

Assignment Key

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

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