



1. Find the missing value in the equation  $\_\_\_ : 1 = 104 : 4$

- (i) 27 (ii) 26 (iii) 23 (iv) 25 (v) 29

2. Find the missing value in the equation  $24 : \_\_\_ = 12 : 3$

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

3. Find the missing value in the equation  $15 : 1 = \_\_\_ : 5$

- (i) 73 (ii) 74 (iii) 75 (iv) 76 (v) 77

4. Find the missing value in the equation  $34 : 1 = 68 : \_\_\_$

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

5. Find the product of extremes of  $8 : 5$  and  $4 : 1$

- (i) 8 (ii) 11 (iii) 6 (iv) 7 (v) 20

6. Find the product of extremes of  $\frac{19}{15} : \frac{7}{10}$  and  $\frac{7}{11} : \frac{1}{6}$

- (i)  $\frac{7}{30}$  (ii)  $\frac{17}{90}$  (iii)  $\frac{19}{90}$  (iv)  $\frac{19}{88}$  (v)  $\frac{49}{110}$

7. Find the product of means of  $1 : 11$  and  $14 : 13$

- (i) 153 (ii) 154 (iii) 156 (iv) 13 (v) 151

8. Find the product of means of  $\frac{8}{3} : \frac{17}{18}$  and  $\frac{11}{2} : \frac{1}{8}$

- (i)  $\frac{187}{36}$  (ii)  $\frac{21}{4}$  (iii)  $\frac{185}{36}$  (iv)  $\frac{1}{3}$  (v)  $\frac{11}{2}$

9. Find the mean proportional of 128 and 2

- (i) 13 (ii) 16 (iii) 128 (iv) 2 (v) 256

10. Find the third proportional of 98 and 14

- (i) 196 (ii) 14 (iii) (-1) (iv) 2 (v) 98

11. Find the fourth proportional of 30, 5 and 54

- (i) 9 (ii) 12 (iii) 6 (iv) 5 (v) 54

12. Which of the ratios is proportional to  $30 : 5$ ?

- (i)  $42 : 7$  (ii)  $42 : 4$  (iii)  $43 : 7$  (iv)  $41 : 7$  (v)  $42 : 10$

13. Find the mean proportional of 8 and 2

- (i) 16 (ii) 8 (iii) 4 (iv) 2 (v) 1

14. Find the third proportional of 32 and 8

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

15. Find the fourth proportional of 42, 7 and 18

- (i) 18 (ii) 5 (iii) 0 (iv) 7 (v) 3

16. Which of the ratios is proportional to 54 : 9?

- (i) 19:3 (ii) 17:3 (iii) 18:3 (iv) 18:5 (v) 18:1

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

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

18. The ratio 5 : 2 is proportional to which of the following ratios?

- (i) 30:12 (ii) 10:8 (iii) 15:10 (iv) 20:4 (v) 25:6

19. Which of the following represents a proportion ?

- (i) 28:42::112:168 (ii) 27:41::81:164 (iii) 30:44::90:88 (iv) 26:40::104:120 (v) 29:43::58:129

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

- (i) 16:12::80:60 (ii) 24:21::48:42 (iii) 15:12::60:48 (iv) 14:12::42:36 (v) 6:5::12:15

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

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

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

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

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

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

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

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

If

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

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

26. If  $x:9::24:12$ , find 'x'

- (i) 20 (ii) 17 (iii) 18 (iv) 16 (v) 19

27. Find the fourth proportional of 18, 36, 15

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

28. Find the third proportional of 12 and 12

- (i) 10 (ii) 12 (iii) 13 (iv) 15 (v) 11

29. Find the mean proportional of 5 and 45

- (i) 15 (ii) 17 (iii) 14 (iv) 13 (v) 16

30. If 3,  $x$ , 75 are in continued proportion, find  $x$

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

31. Find the mean proportional between 3.7 and 92.5

- (i) 16.5 (ii) 18.5 (iii) 17.5 (iv) 20.5 (v) 19.5

32. Find the mean proportional between  $\sqrt{9}$  and 24

- (i)  $6\sqrt{4}$  (ii)  $6\sqrt{2}$  (iii)  $6\sqrt[4]{2}$  (iv) 12 (v)  $6\sqrt{\frac{1}{2}}$

33. Find two numbers whose mean proportional is 8 and third proportional is 512

- (i) 2 and 31 (ii) 2 and 30 (iii) 3 and 32 (iv) 4 and 32 (v) 2 and 32

## Assignment Key

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