

Problems

1) if $a : b = 2 : 3$ and $b : c = 3 : 4$, find $a : b : c$.

a) 2:3:4 b) 1:2:3 c) 2:4:1 d) 4:5:2 e) none

2) if $a : b = 3 : 5$ and $b : c = 5 : 7$, find $a : b : c$.

a) 2:4:5 b) 3:4:5 c) 3:5:7 d) 1:4:5 e) none

3) if $a : b = 2 : 3$ and $b : c = 4 : 5$, find $a : b : c$.

a) 8:12:15 b) 3:6:9 c) 15:6:4 d) 3:8:1 e) none

4) if $a : b = 3 : 5$ and $b : c = 6 : 7$, find $a : b : c$.

a) 10:4:6 b) 1:5:15 c) 18:30:35 d) 12:6:20 e) none

5) if $a : b = 2 : 3$, $b : c = 4 : 5$ and $c : d = 6 : 7$, find $a : b : c : d$.

a) 21:13:7:15 b) 6:4:7:2 c) 14:10:7:20 d) 8:24:30:35 e) none

6) if $a : b = \frac{3}{4} : \frac{2}{5}$ and $b : c = \frac{2}{3} : \frac{4}{7}$, find $a : b : c$.

a) 105:56:24 b) 12:32:55 c) 4:12:15 d) 18:20:32 e) none

7) if $\frac{a}{2} = \frac{b}{3} = \frac{c}{4}$, find $a : b : c$.

a) 1:4:5 b) 31:34:1 c) 2:3:4 d) 3:4:5 e) none

8) if $3a = 5b = 7c$, find $a : b : c$.

a) 35:21:15 b) 31:15:35 c) 64:73:11 d) 26:72:4 e) none

9) Divide Rs.700 among A, B and C in the ratio of 4 : 7 : 9.

a) 120, 234, 62 b) 52, 76, 13 c) 140, 245, 315 d) 348, 532, 140 e) none

10) Divide Rs.2040 among A, B and C in the ratio of 8 : 11 : 15.

a) 480, 660, 900 b) 230, 511, 72 c) 210, 55, 621 d) 310, 100, 535 e) none

11) Divide Rs.4810 among A, B and C in the ratio of 6 : 9 : 11.

a) 2452, 6222, 6565 b) 1100, 5467, 5114 c) 1110, 1665, 2035 d) 2367, 7223, 6325 e) none

12) If $x : y$ is 5 : 4, find $x + y : x - y$.

a) 2:3 b) 4:6 c) 9:1 d) 1:9 e) none

13) If $x : y$ is 3 : 7, find $x + 4 : y - 3$.

a) 3:5 b) 6:5 c) cnadb d) e) none

14) If $x : y$ is 4 : 5, find $3x + 4y : 5x - 3y$.

a) 22:15 b) 15:22 c) 35:25 d) 52:15 e) none

15) If $x : y$ is 5 : 4, find $(x^2 - y^2) : (x^2 + y^2)$.

a) 40:9 b) 16:8 c) 9:41 d) 15:20 e) none

16) The total number of students in a school is 2500. If the number of girls in a school is 1400, then what is the respective ratio of the total number of boys to the total number of girls in the school?

a) 11:14 b) 14:25 c) 1:2 d) 5:7 e) none

17) The total number of students in a school is 31700. If the ratio of boys to the girls in the school is 743:842 respectively. What is the total number of girls in the school?

a) 14860 b) 16480 c) 15340 d) cnbd e) none

18) The salary of Mr. X is 80% of salary of Mr. Y and the salary of Mr. Z is 120% of salary of Mr. X. What is the ratio between the salaries of X, Y and Z respectively?

a) 4:6:5 b) 4:5:6 c) 16:24:25 d) 16:25:24 e) none

19) If the 70% of a number is equal to three-fifth of another number, what is the ratio between 1st number and 2nd number respectively? a) 7:6

b) 6:7 c) 3:7 d) 7:3 e) none

20) The sum of three numbers is 98. If the ratio of the first to second is 2 : 3 and that of the second to the third is 5 : 8, then the second number is:

a) 20 b) 30 c) 48 d) 58 e) none

21) In a bag, there are coins of 25 p, 10 p and 5 p in the ratio of 1 : 2 : 3. If there is Rs. 30 in all, how many 5 p coins are there?

a) 50 b) 100 c) 150 e) 200 e) none

22) Pradeep has coins of denomination of Rs 1, 50p and 25 p in the ratio of 12:10:7. The total worth of the coins he has is Rs 75. Find the number of 25 p coins he has.

a) 48 b) 72 c) 60 d) 56 e) none

23) A beggar had 10p 20p and Rs1 coins in the ratio of 10:17:7 respectively at the end of the day. If that day he earned a total of Rs 57, how many 20p coins did he have?

a) 114 b) 171 c) 95 d) 85 e) none

24) Ratio of marks obtained by A and B in their exam is 5:7. If 5 times the marks obtained by A is 12 more than thrice the marks obtained by B, find marks of A and B. a) 15 & 21 b) 25 & 50 c) 15 & 21 d) cnbd e) none

25) A hostel kitchen has sufficient food for 75 students for a period of 90 days. After 10 days, one third of the students leave the hostel. After another 10 days, 5 students return. From this day on, how many days will the food last? a) 100 days b) 45 days c) 90 days d) 10 days e)

none

26) A sum of Rs 53 is divided among A, B and C in such a way that A gets Rs 7 more than what B gets and B gets Rs 8 more than what C gets, find the ratio of shares?

a) 25:18:10 b) 15:20:18 c) 51:11:12 d) 24:33:11 e) none

27) The students are in the ratio 2:3:5, if 20 students are increased in each class the ratio changes to 4:5:7. Find the total number in the three classes before the increase?

a) 309 c) 100 c) 117 d) 202 e) none

28) The incomes of A and B are in the ratio 3:2 and their expenditures are in the ratio 5:3, if each saves Rs 2000, what are their expenditures?

a) Rs 3500, Rs 1400 b) Rs 5000, Rs 1200 c) Rs 2400, Rs 1300 d) cnbd e) None of these

29) The salaries of A, B and C are of ratio 2:3:5. If the increments of 15%, 10% and 20% are done to their respective salaries, then find the new ratio of their salaries.

a) 20:33:60 b) 21:33:60 c) 22:33:60 d) 23:33:60 e) none

30) A horse takes 3 leaps for every 5 leaps of a mare. If one leap of the horse is equal to 3 leaps of the mare, the ratio of the speed of the horse to that of the mare is

a) 4:5 b) 9:5 c) 8:5 d) 9:2 e) none