



# RATIO AND PROPORTION







#### RATIO AND PROPORTION

- **Q** 1. Find the fourth proportional to the numbers 6, 8, 9.
- (1) 12

(2) 7

- (3) 5
- (4) 14 (5) None of these







#### RATIO AND PROPORTION

- **Q** 2. Find the third proportional to the numbers 3 and 6.
- (1) 21

- (2) 1.5 (3) 18

- (4) 12 (5) None of these







#### **RATIO AND PROPORTION**

- **Q** 3. Two numbers are in the ratio of 9 : 11. If sum of these two numbers is 660, find the difference between the numbers.
- (1) 66

(2) 56

- (3) 46
- (4) 76
- (5) None of these







#### **RATIO AND PROPORTION**

- **Q** 4. A bag contains 1 rupee, 50-paise and 25-paise coins in the ratio 5 : 7 : 9. If the total amount in the bag is 430, find the number of coins of each kind.
- (1) 200, 280, 360

- (2) 280, 200, 360
- (3) 360, 280, 200

(4) 360, 200, 280







#### RATIO AND PROPORTION

- **Q** 5. A bag contains an equal number of 50-paise, 25-paise, 20-paise and 5-paise coins respectively. If the total value is 40, how many coins of each type are there?
- (1) 40

(2) 25

(3) 30

- (4) 20
- (5) None of these







#### RATIO AND PROPORTION

**Q** 6. A man adds 6 litres of water to 11 litres of milk and another 9 litres of water to 8 litres of milk. What is the ratio of the strengths of milk in the two mixtures?

(1) 2 : 3 (2) 3 : 2

(3) 11<sub>.</sub>: 8 (4) 8 : 11 (5) None of these







#### RATIO AND PROPORTION

**Q** 7. Two vessels contain equal quantity of mixtures of milk and water in the ratio 8: 9 and 12: 5 respectively. Both the mixtures are now mixed thoroughly. Find the ratio of milk to water in the new mixture so obtained.

(1) 7:10 (2) 13:21 (3) 21:13 (4) 10:7 (5) None of these







#### RATIO AND PROPORTION

**Q** 8. Two vessels contain equal quantity of mixtures of milk and water in the ratio 9:5 and 4:3 respectively. Both the mixtures are now mixed thoroughly. Find the ratio of milk to water in the new mixture so obtained.

(1) 17:11 (2) 11:17 (3) 8:13 (4) 13:8 (5) None of these







#### RATIO AND PROPORTION

**Q** 9. The contents of two vessels containing water and milk are in the ratio 2:3 and 4:5 are mixed in the ratio 1:2. The resulting mixture will have water and milk in the ratio \_\_\_\_\_.

(1) 77:58 (2) 58:77 (3) 68:77 (4) 77:68 (5) None of these







#### RATIO AND PROPORTION

**Q** 10. The contents of two vessels containing water and milk are in the ratio 3: 4 and 5: 4 are mixed in the ratio 1: 4. The resulting mixture will have water and milk in the ratio

(1) 184 : 176 (2) 167 : 184 (3) 167 : 148 (4) 148 : 167







#### RATIO AND PROPORTION

- **Q** 11. An amount of 950 is distributed among A, B and C in the ratio of 5 : 11 : 3, what is the difference between the shares of B and A?
- (1) 550

**(2) 250** 

- (3) 200
- (4) 300 (5) None of these







#### RATIO AND PROPORTION

**Q** 12. A and B are two alloys of gold and copper prepared by mixing metals in proportions 7: 2 and 7: 11 respectively. If equal quantities of alloys are melted to form a third alloy C, the proportion of gold and copper in C will be :

(1) 5:9 (2) 5:7 (3) 7:5 (4) 9:5 (5) None of these







#### **RATIO AND PROPORTION**

- **Q** 13. The sum of three numbers is 105. If the ratio between the first and second be 2:3 and that between the second and third be 4:5, then find the second number.
- (1) 35

(2) 24

(3) 36

- (4) 45
- (5) None of these







#### RATIO AND PROPORTION

- **Q** 14. The sum of three numbers is 275. If the ratio between the first and second be 3: 7 and that between the second and third be 2: 5, then find the second number.
- (1) 30

(2) 175

(3)70

- (4) 80
- (5) None of these







#### RATIO AND PROPORTION

**Q** 15. If A: B = 3: 4, B: C = 5: 7 and C: D = 3: 5, then find A: B: C: D.

(1) 9:21:12:28 (2) 45:60:84:140 (3) 9:12:28:21

(4) 9:12:21:82 (5) None of these







#### RATIO AND PROPORTION

**Q** 16. A hound pursues a hare and takes 6 leaps for every 7 leaps of the hare, but 5 leaps of the hound are equal to 6 leaps of the hare. Compare the rates of the hound and the hare.

(1) 36:35 (2) 35:34 (3) 34:33 (4) 3:32 (5) None of these







#### RATIO AND PROPORTION

**Q** 17. A hound pursues a hare and takes 3 leaps for every 4 leaps of the hare, but 2 leaps of the hound are equal to 3 leaps of the hare. Compare the rates of the hound and the hare.

(1) 9:8 (2) 7:6 (3) 5:6 (4) 8:9 (5) None of these







#### **RATIO AND PROPORTION**

**Q** 18. In 28 litres mixture of milk and water the ratio of milk and water is 5 : 2. How much water should be added in the mixture so that the ratio of milk to water becomes 2 : 5?

(1) 42 litres

(2) 32 litres

(3) 24 litres

(4) 39 litres







#### RATIO AND PROPORTION

**Q** 19. In a mixture of 60 litres, the ratio of milk and water is 2 : 1. If the ratio of milk and water is to be 1:2, then the amount of water to be further added is:

(1) 42 litres

(2) 56 litres (3) 60 litres

(4) 77 litres







#### RATIO AND PROPORTION

**Q** 20. A mixture contains milk and water in the ratio of 9: 4. On adding 4 litres of water, the ratio of milk to water becomes 3: 2. Find the total quantity of the original mixture.

(1) 26 litres

(2) 18 litres\_

(3) 10 litres

(4) 30 litres







#### RATIO AND PROPORTION

**Q** 21. A mixture contains milk and water in the ratio of 4:3. On adding 2 litres of water, the ratio of milk to water becomes 8:7. Find the total quantity of the final mixture.

(1) 16 litres

(2) 12 litres\_

(3) 28 litres

(4) 30 litres







#### RATIO AND PROPORTION

- **Q** 22. The ratio between two numbers is 15 : 7. If each number be decreased by 2, the ratio becomes 7: 3. Find the numbers.

- (1) 15, 7 (2) 30, 14 (3) 45, 21 (4) 60, 28 (5) None of these







#### RATIO AND PROPORTION

**Q** 23. The incomes of A and B are in the ratio 9: 4 and their expenditures are in the ratio 7: 3. If each saves 2000, what are their incomes?

(1) 90000, 4000 (2) 27000, 12000 (3) 72000, 16000 (4) 72000, 32000







#### RATIO AND PROPORTION

**Q** 24. A mixture contains milk and water in the ratio of 9: 4. On adding 8 litres of water, the ratio of milk to water becomes 3: 2. Find the total quantity of the original mixture.

(1) 52 litres

(2) 26 litres\_

(3) 104 litres

(4) 30 litres







#### RATIO AND PROPORTION

**Q** 25. A mixture contains milk and water in the ratio of 4:3. On adding 6 litres of water, the ratio of milk to water becomes 8:7. Find the total quantity of the final mixture.

(1) 168 litres

(2) 12 litres\_

(3) 42 litres

(4) 84 litres







#### RATIO AND PROPORTION

- **Q** 26. Find the number which, when added to the terms of the ratio 13: 28 makes it equal to the ratio 1: 2.
- (1) 4

(2) 3

(3) 2

(4) 1







#### RATIO AND PROPORTION

- **Q** 27. Find the number which, when subtracted from the terms of the ratio 11: 25 makes it equal to the ratio 4: 11.
- (1) 4

**(2)** 3

- (3) 2
- (4) 1
- (5) None of these







#### RATIO AND PROPORTION

**Q 28.** A bucket contains a mixture of two liquids A and B in the proportion 5 : 3. If 16 litres of the mixture is replaced by 16 litres of liquid B, then the ratio of the two liquids becomes 3 : 5. How much of the liquid B was there in the bucket?

mock test platform !

- (1) 25 litres
- (2) 15 litres
- (3) 18 litres

(4) 24 litres





#### RATIO AND PROPORTION

**Q 29.** A bucket contains a mixture of two liquids A and B in the proportion 6:5. If 33 litres of the mixture is replaced by 33 litres of liquid B, then the ratio of the two liquids becomes 3:4. How much of the liquid A was there in the bucket?

mock test platform

(1) 84 litres

(2) 48 litres

(3) 70 litres

(4) 64 litres





#### RATIO AND PROPORTION

- **Q 30.** A vessel contains liquids A and B in ratio 3 : 1. If 8 litres of the mixture are removed and the same quantity of liquid B is added, the ratio becomes 1 : 3. What quantity does the vessel hold?
- (1) 12 litres
- (2) 14 litres\_

- (3) 16 litres
- (4) 10 litres







#### RATIO AND PROPORTION

**Q** 31. A vessel contains liquids A and B in ratio 7: 6. If 26 litres of the mixture is removed and the same quantity of liquid B is added, the ratio becomes 6:7. What quantity does the vessel hold?

(1) 142 litres (2) 172 litres (3) 156 litres (4) 182 litres







#### RATIO AND PROPORTION

**Q** 32. An employer reduces the number of his employees in the ratio 9 : 4 and increases their wages in the ratio 2 : 5. State whether his bill of total wages increases or decreases, and in what ratio?

(1) Decrease, 10:9

(2) Increase, 10:9

(3) Decrease 9:11

(4) Increase, 9:10

(5) None of these

mock test platform





#### RATIO AND PROPORTION

- **Q** 33. Two candles of the same height are lighted at the same time. The first is consumed in 7 hours and the second in 6 hours. Assuming that each candle burns at a constant rate, in how many hours after being lighted, the ratio between the first and second candles becomes 3:1.
- (1) 5 hours 36 minutes
- (4) 6 hours

(2) 5 hours

- (3) 5 hours 60 minutes
- (5) None of these

mock test platform





#### RATIO AND PROPORTION

- **Q** 34. Two candles of the same height are lighted at the same time. The first is consumed in 3 hours and the second in 1 hour. Assuming that each candle burns at a constant rate, in how many hours after being lighted, the ratio between the first and second candles become 2:1.
- (1) 48 minutes (2) 1 hour 36 min (3) 36 minutes (5) None of these
- (4) 60 minutes





#### RATIO AND PROPORTION

**Q** 35. Divide 1162 into three parts such that 4 times the first is equal to 5 times the second and 7 times the third. Find the value of smallest part.

(1) 490

(2) 492

(3) 390

(4) 280







#### RATIO AND PROPORTION

- Q 36. Divide 680 among A, B and C such that A gets 2/3 of what B gets and B gets 1/4th of what C gets. What is C's share?
- (1) 280

- (2) 380
- (3) 480
- (4) 120
- (5) None of these







#### RATIO AND PROPORTION

**Q 37.** When 50% of one number is added to a second number, the second number increases to its four-thirds. What is the ratio between the first number and the second number?

(1) 3 : 2 (2) 3 : 4

(3) 2 : 3 (4) Data inadequate







#### RATIO AND PROPORTION

- **Q 38**. 600 has been divided among A, B and C in such a way that 40 more than (2/5) of A's share, 20 more than (2/7) of B's share, 10 more than (9/17) of C's share, are all equal. A's share is:
- (1) 280

(2) 170

- (3) 150
- (4) 200
- (5) None of these







#### RATIO AND PROPORTION

**Q 39.** Gold is 19 times as heavy as water and copper 9 times as heavy as water. The ratio in which these two metals be mixed so that the mixture is 15 times as heavy as water, is:

(1) 1 : 2 (2) 2 : 3 (3) 3 : 2 (4) 19 : 135 (5) None of these







#### RATIO AND PROPORTION

- **Q** 40. One year ago the ratio between Laxman's and Gopal's salary was 3:4. The individual ratios between their last year's and this year's salaries are 4:5 and 2: 3 respectively. At present the total of their salary is 4160. The salary of Laxman now, is-
- (1) 1600
- (2) 2560

- (3) 1040 (4) 3120 (5) None of these





