

INTENSE PRACTICE ACADEMY

RATIO AND PROPORTION – MODERATE LEVEL

20 Questions with Answers and Explanations

Q1. The ratio of boys to girls in a class is 3 : 2. If there are 18 boys, find the number of girls.

Answer: 12

Explanation:

Ratio of boys to girls = 3 : 2.

If 3 parts represent 18 boys, then 1 part = 6.

Girls = 2 parts = $2 \times 6 = 12$.

Q2. The ratio of the ages of A and B is 4 : 5. If A is 20 years old, find the age of B.

Answer: 25 years

Explanation:

Ratio of ages = 4 : 5.

If 4 parts = 20 years, then 1 part = 5 years.

Age of B = 5 parts = 25 years.

Q3. Divide Rs.360 between A and B in the ratio 2 : 3.

Answer: A = Rs.144, B = Rs.216

Explanation:

Total parts = $2 + 3 = 5$.

Value of 1 part = $360 \div 5 = 72$.

A gets $2 \times 72 = 144$.

B gets $3 \times 72 = 216$.

Q4. The ratio of milk to water in a mixture is 5 : 1. If the mixture contains 30 litres, find the quantity of water.

Answer: 5 litres

Explanation:

Ratio of milk to water = 5 : 1.

Total parts = 6.

Water = $(1/6) \times 30 = 5$ litres.

Q5. If the ratio of two numbers is 7 : 9 and their sum is 128, find the numbers.

Answer: 49 and 79

Explanation:

Let the numbers be $7x$ and $9x$.

Sum = $7x + 9x = 16x$.

$16x = 128 \Rightarrow x = 8$.

Numbers are 56 and 72.

Q6. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.7500, find the salary of the second employee.

Answer: Rs.10500

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.
1 part is found by dividing the first salary by 5.
Salary of second employee = 7 parts.

Q7. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.8000, find the salary of the second employee.

Answer: Rs.11200

Explanation:

Ratio of salaries = 5 : 7.
If 5 parts correspond to the first salary.
1 part is found by dividing the first salary by 5.
Salary of second employee = 7 parts.

Q8. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.8500, find the salary of the second employee.

Answer: Rs.11900

Explanation:

Ratio of salaries = 5 : 7.
If 5 parts correspond to the first salary.
1 part is found by dividing the first salary by 5.
Salary of second employee = 7 parts.

Q9. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.9000, find the salary of the second employee.

Answer: Rs.12600

Explanation:

Ratio of salaries = 5 : 7.
If 5 parts correspond to the first salary.
1 part is found by dividing the first salary by 5.
Salary of second employee = 7 parts.

Q10. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.9500, find the salary of the second employee.

Answer: Rs.13300

Explanation:

Ratio of salaries = 5 : 7.
If 5 parts correspond to the first salary.
1 part is found by dividing the first salary by 5.
Salary of second employee = 7 parts.

Q11. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.10000, find the salary of the second employee.

Answer: Rs.14000

Explanation:

Ratio of salaries = 5 : 7.
If 5 parts correspond to the first salary.
1 part is found by dividing the first salary by 5.
Salary of second employee = 7 parts.

Q12. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.10500, find the salary of the second employee.

Answer: Rs.14700

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.

Q13. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.11000, find the salary of the second employee.

Answer: Rs.15400

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.

Q14. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.11500, find the salary of the second employee.

Answer: Rs.16100

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.

Q15. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.12000, find the salary of the second employee.

Answer: Rs.16800

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.

Q16. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.12500, find the salary of the second employee.

Answer: Rs.17500

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.

Q17. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.13000, find the salary of the second employee.

Answer: Rs.18200

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.

Q18. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.13500, find the salary of the second employee.

Answer: Rs.18900

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.

Q19. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.14000, find the salary of the second employee.

Answer: Rs.19600

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.

Q20. The ratio of the salaries of two employees is 5 : 7. If the first employee earns Rs.14500, find the salary of the second employee.

Answer: Rs.20300

Explanation:

Ratio of salaries = 5 : 7.

If 5 parts correspond to the first salary.

1 part is found by dividing the first salary by 5.

Salary of second employee = 7 parts.