

WORKSHEET
MATHEMATICS
CLASS-8

CHAPTER:7-PROPORTIONAL REASONING-1

1. Find the ratio equivalent to 20:12.
2. In a group of 64 students, 42 are boys. Find the ratio of the number of boys and girls in that group.
3. If $48:40 = 30:x$ then find the value of x.
4. There are b boys and g girls in a class. Then find the ratio of the number of boys to the number of students in the class.
5. Express the statements as ratio:
 - a) The cost of a chair is Rs 480 and the cost of one table is Rs 720.
 - b) The distance between Delhi to Bharatpur is 220 km and the distance between Agra to Jaipur is 300 km.
6. Sabia's father earns Rs 48000 per month. He spent Rs 42000. Find the ratio of:
 - a) his expenditure to salary.
 - b) his savings to salary.
 - c) his expenditure to savings.
7. The length and the breadth of a rectangular field are 45m and 15m respectively. Find the ratio of the length to the breadth of the field.
8. Divide Rs 6288 between A,B and C in the ratio 3:4:5.
9. Height of a tower A is 1480cm, height of another tower B is 1560cm. Their weights are proportional to their heights. If tower A's weight is 480kg, then find the weight of tower B.
10. A map is given with a scale of 1cm = 500km. What is the actual distance between the two places in km, if the distance in the map is 2.5cm?
11. The ratio of the girls to the boys in a school is 6:7. If the number of girls in the school is 1260, find:
 - a) the number of boys in the school.
 - b) The total number of students in the school.
12. An office opens at 9:am and closes at 5:30pm with a lunch break of 30min. What is the ratio of the lunch break to the total period in the office?
13. The temperature has increased by 5°C in the last 30 days. If the rate of the temperature increase remains the same, how many degrees will the temperature increase by in the next twelve days?
14. 25 bags of rice each weighing 40kg weight costs Rs 27500. Find the cost of 35 bags of rice each weighing 50kg weight.

15. If 24 men can finish a piece of work in 15 days. How many men will be needed to finish it in 40 days.
16. A train travels 650km in 5hrs.
 - a) How much distance will it cover in 12 hrs?
 - b) How long will it take to travel 975 km.
17. In an army camp, there was provision for 850 men for 30 days. However, 750 men attended the camp. How long did the provisions last?
18. If the angles of a triangle are in the ratio 4:5:9, find the measures of the angles of the triangle?
19. The ratio of metal A and metal B in an alloy is 5:7. Find the weight of metal A in 14.4gm of the alloy.
20. The prices of three articles are in the ratio 3:6:5. If their total price is Rs 98, find the price of the third article.

ANSWERS:

1. 15:9
2. 21:11
3. 25
4. $\frac{b}{b+g}$
5. a) 2:3 b) 11:15
6. a) 7:8 b) 1:8 c) 7:1
7. 3:1
8. A's share-Rs1572 B's share-Rs2096 C's share-Rs2620
9. 506kg
10. 1250km
11. a) 1470 b) 2730
12. 1:17
13. 2°C
14. Rs 48125
15. 40 days
16. a) 1560 km b) 7 hrs 30 min
17. 34 days
18. 40,50,90
19. 6g
20. Rs 35