

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2023-24

CLASS : 6 / SUBJECT : MATHEMATICS

LESSON – 12: Ratio and Proportion

1. Express 25 : 45 ratios into it's simplest form.
2. What is the simplest form of 32 : 24?
3. Find the simplest form of the given ratio 70 : 105.
4. Find the ratio of Rs. 35 to Rs. 175, convert it to it's simplest form.
5. Find the ratio of 75 paise to Rs. 5.
6. Find the ratio of 2 years to 6 months.
7. Find the ratio of 45 m to 1 km.
8. A packet of salt weighs 25 kg and a packet of sugar weighs 35 kg. Find the ratio of weight of salt to weight of sugar.
9. Out of 45 students in a class, 20 students are boys and the remaining are girls. Find the ratio of boys to girls and girls to boys.
10. Divide 50 kg rice between Bob and John in the ratio of 2 : 3.
11. Fill in the missing number

$$\frac{3}{5} = \frac{\dots}{35}$$

12. Fill in the missing number

$$\frac{5}{9} = \frac{\dots}{81}$$

13. The ratio of Julie's money to Pradeep's money is 4 : 6. If Julie has Rs. 500, how much money does Pradeep have?
14. Determine if the following ratio form a proportion.

$$25 \text{ cm} : 1 \text{ m and Rs. } 40 : \text{Rs. } 160$$

15. Determine if the following ratio form a proportion.

$$2 \text{ kg} : 70 \text{ kg and } 30 \text{ sec} : 5 \text{ minutes}$$

16. A rectangular field is 80 m long and 60 m wide. Find the ratio of it's length to perimeter.
17. . If the cost of 14m of cloth is Rs.1890 ,find the cost of 6m of cloth.
18. **If the price of 5 kg potato is ₹ 150. Find the value of 24kg potato.**
19. **The length of the shadow of a 168 cm tall person at a particular time of day is 252 cm. What will be the length of the shadow of a 158 cm tall person at the same time of the day?**

Solution:

Length of shadow for 168 cm = 252 cm

Length of the shadow for 1 cm = $\frac{252}{168} = 1.5$ cm

Length of the shadow for 158 cm = $1.5 \times 158 = 237$ cm.

Therefore, the length of the shadow for a 158 cm tall person is 237 cm.

20. An iron rod of uniform thickness of length 5.6 m weighs 2.4 kg. How much will be the weight of 5 iron rods of the same thickness and length 8.4 m?

Solution:

Weight of 5.6 m rod = 2.4 kg

Weight of 1 m rod = $2.4 / 5.6 = 3/7$ kg

Weight of 8.4 m rod = $3/7 \times 8.4 = 3.6$ kg

Weight of 5 such rods = 5×3.6 kg = 18 kg.

21. A train runs 200 kilometres in 5 hours. How many kilometres does it run in 7 hours?

ANSWER:

Distance covered by the train in 5 hours = 200 km

Distance covered by the train in 1 hour = $200/5=40$ km

Distance covered by the train in 7 hours = $40 \times 7=280$ km

22.

SOLUTIONS

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|----------|------------------|-------------------------------|--------------|-----------|----------|------------|
| 1) 5 : 9 | 2) 4 : 3 | 3) 2 : 3 | 4) 1 : 5 | 5) 3 : 20 | 6) 4 : 1 | 7) 9 : 200 |
| 8) 5 : 7 | 9) 4 : 5 & 5 : 4 | 10) Bob = 20 kg, John = 30 kg | 11) 21 | 12) 45 | | |
| 13) 750 | 14) yes(1:4=1:4) | 15) not in proportion | 16) 280, 2:7 | 17) ₹810 | | |
| 18) ₹720 | | | | | | |
