

CHAPTER-3 | Proportional Reasoning-2

QUIZ
PART-08

1. In inverse proportion, when one quantity increases, the other quantity:
- Increases
 - Decreases
 - Remains constant
 - Doubles
- (B)

Explanation : In an inverse proportion, one quantity increases while the other decreases.

2. If 5 workers can move 4500 bricks in a day, the number of workers needed to move 18000 bricks in a day is:
- 10
 - 15
 - 20
 - 25
- (C)

Explanation: 18000 bricks is 4 times 4500 bricks, so 4 times as many workers are needed: $5 \times 4 = 20$ workers.

3. Puneeth's father travelled from Lucknow to Kanpur on a motorcycle at:
- 15 km/h
 - 30 km/h
 - 45 km/h
 - 60 km/h
- (B)

Explanation: The motorcycle speed given in the example is 30 km/h.

4. At 30 km/h, the journey from Lucknow to Kanpur takes:
- 1.5 hours
 - 2 hours
 - 3 hours
 - 6 hours
- (C)

Explanation: The chapter states that the journey takes 3 hours at 30 km/h.

5. If the speed is increased from 30 km/h to 60 km/h, the travel time becomes:
- 6 hours
 - 4 hours
 - 3 hours
 - 1.5 hours
- (D)

Explanation : Doubling the speed halves the travel time. $3 \div 2 = 1.5$ hours.

6. Which pair of quantities in the chapter shows inverse proportion?
- Speed and time
 - Distance and time (same speed)
 - Length and breadth
 - Cost and profit
- (A)

Explanation : As speed increases, travel time decreases, showing inverse proportion.

7. According to the table, travelling at 15 km/h takes:
- 3 hours
 - 6 hours
 - 9 hours
 - 18 hours
- (B)

Explanation : The table shows that at 15 km/h, the travel time is 6 hours.

8. According to the table, travelling at 5 km/h takes:
- 6 hours
 - 9 hours
 - 18 hours
 - 24 hours
- (C)

Explanation : Walking at 5 km/h takes 18 hours for the journey.

9. In the given table, speed $\times$ time is always:
- 60
 - 90
 - 120
 - 180
- (B)

Explanation : $5 \times 18 = 90$, $15 \times 6 = 90$, $30 \times 3 = 90$, and $60 \times 1.5 = 90$. This constant product shows inverse proportion.

10. If 15 men reap a field in 35 days, 21 men will reap the same field in:
- 20 days
 - 25 days
 - 10 days
 - 15 days
- (B)

Explanation : Men and days are inversely proportional. $15 \times 35 = 21 \times x$, so $x = 25$ days.