

**Q1:** If  $6 : 11 = 42 : x$ , then the value of  $x$  is:

- (a) 66
- (b) 77
- (c) 88
- (d) 99

**Solution:**

$$\frac{6}{11} = \frac{42}{x} \implies x = \frac{11 \times 42}{6} = 77$$

**Answer:** B

**Q2:** The ratio of 1 hour 15 minutes to 45 minutes is:

- (a) 3:1
- (b) 5:3
- (c) 7:3
- (d) 9:5

**Solution:**

$$\begin{aligned}1 \text{ hour } 15 \text{ minutes} &= 75 \text{ minutes} \\ \text{Ratio} &= \frac{75}{45} = \frac{5}{3}\end{aligned}$$

**Answer:** B

**Q3:** 42% of 600 is equal to:

- (a) 210
- (b) 240
- (c) 252
- (d) 280

**Solution:**

$$42\% \text{ of } 600 = \frac{42}{100} \times 600 = 252$$

**Answer:** C

**Q4:** What percentage is 84 of 350?

- (a) 20%
- (b) 24%
- (c) 28%
- (d) 32%

**Solution:**

$$\frac{84}{350} \times 100 = 24\%$$

**Answer:** B

**Q5:** A number is increased by 22% and then decreased by 22%. The net change in the number is:

- (a) 0%
- (b) 4.42% decrease
- (c) 4.42% increase
- (d) 22% decrease

**Solution:** Let the number be  $x$ .

$$x \times 1.22 \times 0.78 = 0.9558x$$

$$\text{Net change} = (1 - 0.9558) \times 100 = 4.42\% \text{ decrease}$$

**Answer:** B

**Q6:** The price of a laptop is reduced by 12%. If the original price was Rs.45,000, the new price is:

- (a) Rs.39,600
- (b) Rs.40,000
- (c) Rs.40,500
- (d) Rs.41,000

**Solution:**

$$\text{New price} = 45000 \times 0.88 = 39600$$

**Answer:** A

**Q7:** If the cost price of a chair is Rs.1,500 and the selling price is Rs.1,875, the profit percentage is:

- (a) 15%
- (b) 20%
- (c) 25%
- (d) 30%

**Solution:**

$$\text{Profit} = 1875 - 1500 = 375$$

$$\text{Profit percentage} = \frac{375}{1500} \times 100 = 25\%$$

**Answer:** C

**Q8:** A merchant sells a table for Rs.2,400 at a loss of 25%. The cost price of the table is:

- (a) Rs.2,800
- (b) Rs.3,000
- (c) Rs.3,200
- (d) Rs.3,600

**Solution:**

$$\text{Selling price} = 0.75 \times \text{Cost price} \implies 2400 = 0.75 \times \text{Cost price}$$

$$\text{Cost price} = \frac{2400}{0.75} = 3200$$

**Answer:** C

**Q9:** The simple interest on Rs.1,800 for 5 years at 8% per annum is:

- (a) Rs.540
- (b) Rs.600
- (c) Rs.720
- (d) Rs.800

**Solution:**

$$\text{Simple Interest} = \frac{1800 \times 8 \times 5}{100} = 720$$

**Answer:** C

**Q10:** If the principal is Rs.3,500, the rate is 10% per annum, and the time is 2 years, the simple interest is:

- (a) Rs.600
- (b) Rs.700
- (c) Rs.800
- (d) Rs.900

**Solution:**

$$\text{Simple Interest} = \frac{3500 \times 10 \times 2}{100} = 700$$

**Answer:** B

**Q11:** In a village of 800 people, 35% are children. The number of adults is:

- (a) 420
- (b) 480
- (c) 520
- (d) 560

**Solution:**

$$\text{Number of children} = 0.35 \times 800 = 280$$

$$\text{Number of adults} = 800 - 280 = 520$$

**Answer:** C

**Q12:** A car travels 300 km in 5 hours. If it travels at the same speed, the distance covered in 3 hours is:

- (a) 150 km
- (b) 160 km
- (c) 180 km
- (d) 200 km

**Solution:**

$$\text{Speed} = \frac{300}{5} = 60 \text{ km/h}$$

$$\text{Distance} = 60 \times 3 = 180 \text{ km}$$

**Answer:** C

**Q13:** The ratio of red to blue marbles in a bag is 4:7. If there are 66 marbles in total, the number of red marbles is:

- (a) 18
- (b) 20
- (c) 24
- (d) 28

**Solution:**

$$\text{Total parts} = 4 + 7 = 11$$

$$\text{Number of red marbles} = \frac{4}{11} \times 66 = 24$$

**Answer:** C

**Q14:** A shop offers a 20% discount on a camera priced at Rs.5,000. The selling price of the camera is:

- (a) Rs.3,800
- (b) Rs.4,000
- (c) Rs.4,200
- (d) Rs.4,500

**Solution:**

$$\text{Selling price} = 5000 \times 0.80 = 4000$$

**Answer:** B

**Q15:** The value of a machine depreciates by 10% every year. If the current value is Rs.50,000, the value after 2 years will be:

- (a) Rs.40,000
- (b) Rs.40,500
- (c) Rs.42,000
- (d) Rs.45,000

**Solution:**

$$\text{Value after 2 years} = 50000 \times (0.90)^2 = 50000 \times 0.81 = 40500$$

**Answer:** B