

Section : Part C Elementary Mathematics

Q.1 A loss of 12% gets converted into a profit of 8.5% when the selling price of an article is increased by ₹164. The cost price of the article is:

- Ans
- 1. ₹760
 - 2. ₹840
 - 3. ₹850
 - 4. ₹800

Question ID : 65497828902
Status : Answered
Chosen Option : 4

Q.2 Pens are bought by a shopkeeper at the rate of ₹1,200 for 150 pens and sold at the rate of ₹1,620 for 180 pens. His profit or loss per cent is:

- Ans
- 1. Profit 12%
 - 2. Profit 12.5%
 - 3. Loss 12%
 - 4. Profit 14%

Question ID : 65497828900
Status : Answered
Chosen Option : 2

Q.3 The value of $8 - [88 \div 2 \text{ of } 11 - (22 - 72 \div 4)]$ is:

- Ans
- 1. 0
 - 2. 6
 - 3. 4
 - 4. 8

Question ID : 65497828899
Status : Answered
Chosen Option : 4

Q.4 If the compound interest on a certain sum for 2 years at 4% per annum is ₹1530. What would be the simple interest on the same sum for the same period and at the same rate?

- Ans**
- 1. ₹1400
 - 2. ₹1500
 - 3. ₹1350
 - 4. ₹1510

Question ID : 65497828920
Status : Answered
Chosen Option : 2

Q.5 A takes 15 days to complete $\frac{5}{7}$ of a work. With the help of B, they finish the whole work in 12 days. In how many days, B alone will complete the same work?

- Ans**
- 1. 18 days
 - 2. 20 days
 - 3. 28 days
 - 4. 25 days

Question ID : 65497828901
Status : Answered
Chosen Option : 3

Q.6 A shopkeeper sells an item for ₹1,638 after offering a discount of 16% on its list price. Had he not offered any discount, he would have earned a profit of 30%. What is the cost price (in ₹) of the article?

- Ans**
- 1. 1,500
 - 2. 1,425
 - 3. 1,400
 - 4. 1,450

Question ID : 65497828917
Status : Answered
Chosen Option : 1

Q.7 There are five numbers. The average of the first four numbers is $\frac{5}{6}$ of the fifth number. If the average of all the five numbers is 26, then what is the fifth number?

- Ans**
- 1. 28
 - 2. 29
 - 3. 30
 - 4. 32

Question ID : 65497828911
Status : Answered
Chosen Option : 3

Q.8 The HCF of 2091, 3485 and 4879 is x . The sum of the digits of x is:

- Ans
- 1. 20
 - 2. 22
 - 3. 19
 - 4. 23

Question ID : 65497828910
Status : Answered
Chosen Option : 1

Q.9 Working together, A, B and C can do a certain work in 10 days. A is 20% more efficient than B, and C is 50% less than efficient than B. B alone can complete the same work in:

- Ans
- 1. $22\frac{1}{2}$ days
 - 2. 27 days
 - 3. 30 days
 - 4. 25 days

Question ID : 65497828915
Status : Answered
Chosen Option : 2

Q.10 A trader marked the price of an article so as to earn a profit of 28% on its cost price. He sold it by giving 15% discount on its marked price. What was his actual profit percentage?

- Ans
- 1. 13%
 - 2. 9%
 - 3. 8.8%
 - 4. 12.5%

Question ID : 65497828912
Status : Answered
Chosen Option : 3

Q.11 The lengths of the sides of a right-angled triangle are in the ratio 5 : 12 : 13 and its perimeter is 90 cm. What is the area (in cm^2) of the triangle?

- Ans
- 1. 540
 - 2. 780
 - 3. 270
 - 4. 702

Question ID : 65497828921
Status : Answered
Chosen Option : 3

Q.12 There is 70% increase in an amount in 7 years at simple interest. What will be the compound interest on ₹8,000 after 3 years at the same rate of interest?

- Ans
- 1. ₹2,640
 - 2. ₹2,548
 - 3. ₹2,654
 - 4. ₹2,648

Question ID : 65497828903
 Status : Answered
 Chosen Option : 4

Q.13 The income of A is 70% more than the income of B, and the income of C is 80% of the combined income of A and B. By what percentage is the income of A less than that of C? (Correct to one decimal place)

- Ans
- 1. 27.1%
 - 2. 20.4%
 - 3. 21.3%
 - 4. 19.8%

Question ID : 65497828913
 Status : Answered
 Chosen Option : 2

Q.14 The prices of two woolen jackets A and B are in the ratio 7 : 9. If jacket A costs ₹380 less than jacket B, then find the price of jacket B.

- Ans
- 1. ₹1680
 - 2. ₹1330
 - 3. ₹1710
 - 4. ₹1650

Question ID : 65497828919
 Status : Answered
 Chosen Option : 3

Q.15 If three numbers are in the ratio of 3 : 5 : 7 and their LCM is 2415, what is the difference between the second number and the first number?

- Ans
- 1. 46
 - 2. 92
 - 3. 23
 - 4. 69

Question ID : 65497828904
 Status : Answered
 Chosen Option : 1

Q.16 A wire encloses an area of 18634 cm^2 , when it is bent in the form of a circle. The same wire is now bent to form a rectangle whose sides are in the ratio $5 : 6$. The length (in cm) of the shorter side of the rectangle is (Take $\pi = \frac{22}{7}$):

- Ans
- 1. 100
 - 2. 132
 - 3. 110
 - 4. 154

Question ID : **65497828898**
 Status : **Answered**
 Chosen Option : **3**

Q.17 If the average of the following six observations: $x + 2, x + 5, x + 8, x + 11, x + 14$ and $x + 17$ is 12.5, what is the average of the first three observations?

- Ans
- 1. 3
 - 2. 9
 - 3. 8
 - 4. 6

Question ID : **65497828905**
 Status : **Answered**
 Chosen Option : **3**

Q.18 By selling 18 oranges for ₹151.20, a man loses 20%. How many oranges should he sell for ₹819 to earn a profit of 30%?

- Ans
- 1. 50
 - 2. 65
 - 3. 60
 - 4. 45

Question ID : **65497828918**
 Status : **Answered**
 Chosen Option : **3**

Q.19 A car covers the first 41 km of its journey in 45 min and covers the remaining 23 km in 35 min. What is the average speed (in m/sec) of the car?

- Ans
- 1. $13\frac{1}{3}$
 - 2. 15
 - 3. 16
 - 4. $16\frac{2}{3}$

Question ID : **65497828909**
 Status : **Answered**
 Chosen Option : **1**

Q.20 Somu has borrowed ₹10,000 from a money lender with simple interest at a rate of 7% per 6 months. How much amount will he pay to the money lender after 3 years?

- Ans
- 1. ₹13,000
 - 2. ₹14,200
 - 3. ₹12,500
 - 4. ₹12,100

Question ID : 65497828907
 Status : Answered
 Chosen Option : 2

Q.21 If a sum of ₹6225 is divided into three parts such that 4 times the first part is equal to 5 times the second part and 7 times the third part. The difference between the first and second part (in ₹) is:

- Ans
- 1. 525
 - 2. 300
 - 3. 600
 - 4. 450

Question ID : 65497828897
 Status : Answered
 Chosen Option : 1

Q.22 The value of $\left(\frac{7}{16} \div 10\frac{1}{2} \text{ of } 7\frac{1}{5}\right) \times 3\frac{3}{5} - 1\frac{1}{3} \times 1\frac{1}{8} \div \frac{1}{2} + \frac{3}{4}$ is:

- Ans
- 1. $-\frac{179}{48}$
 - 2. $\frac{61}{8}$
 - 3. $\frac{181}{24}$
 - 4. $-\frac{107}{48}$

Question ID : 65497828908
 Status : Answered
 Chosen Option : 4

Q.23 A boat can go 10 km upstream and 11 km downstream in a total time of 52 minutes. If the speed of the stream is 5 km/h, then what is the speed (in km/h) of the boat when going downstream?

- Ans
- 1. 30
 - 2. 20
 - 3. 35
 - 4. 25

Question ID : 65497828916
 Status : Answered
 Chosen Option : 4

Q.24 In a mixture of 75 litres, the ratio of milk to water is 3 : 2. If the ratio is to be 1 : 2, how much of water should be added?

- Ans**
- 1. 65 litres
 - 2. 90 litres
 - 3. 60 litres
 - 4. 50 litres

Question ID : **65497828906**
Status : **Answered**
Chosen Option : **3**

Q.25 In 2021, a cricket team wants to win 80% of the matches out of 225 matches. Out of 120 matches already played, the success rate is 70%. What should be the success rate for the remaining matches in order to reach the target?

- Ans**
- 1. $89\frac{5}{7}\%$
 - 2. 86%
 - 3. 90%
 - 4. $91\frac{3}{7}\%$

Question ID : **65497828914**
Status : **Answered**
Chosen Option : **4**