

Section : Part C Elementary Mathematics

Q.1 A can complete $\frac{2}{3}$ of a work in 10 days and B can complete $\frac{4}{5}$ of the same work in 8 days. They work together for 5 days. The remaining work is completed by C alone in 6 days. In how many days C alone can complete 75% of the same work?

- Ans**
- 1. 27
 - 2. 36
 - 3. 18
 - 4. 30

Question ID : 65497830683

Status : Answered

Chosen Option : 1

Q.2 An electric heater was sold at a profit of 12%. If its cost had been 5% less and it had been sold for ₹180 less, the profit would have been 10%. What is the cost price of the electric heater?

- Ans**
- 1. ₹2,250
 - 2. ₹2,380
 - 3. ₹2,400
 - 4. ₹2,000

Question ID : 65497830675
Status : Answered
Chosen Option : 3

Q.3 The price of sugar rises by 33%. By what percent should a family reduce the consumption of sugar, so as NOT to increase the expenditure?

- Ans**
- 1. 30
 - 2. 24.8
 - 3. 29.8
 - 4. 33

Question ID : 65497830693
Status : Answered
Chosen Option : 2

Q.4 A cistern has a leak which would empty it in 6 hours. A tap is turned on which admits 10 litres of water per minute into the cistern. When it is full it now emptied in 10 hours. What is the capacity (in litres) of the cistern?

- Ans**
- 1. 8000
 - 2. 9000
 - 3. 8500
 - 4. 10000

Question ID : 65497830694
Status : Answered
Chosen Option : 2

Q.5 Two ropes, one 8 m long and the other 14 m long are to be cut into pieces of the same length. What will the maximum possible length of each piece be?

- Ans**
- 1. 1 m
 - 2. 4 m
 - 3. 2 m
 - 4. 6 m

Question ID : 65497830684
Status : Answered
Chosen Option : 4

Q.6 If the radius and the height of a circular cylinder are 10 cm and 15 cm, respectively, and the radius of a sphere is 5 cm, then what is the ratio of the curved surface area of the cylinder to that of the sphere?

- Ans**
- 1. 3 : 2
 - 2. 5 : 1
 - 3. 3 : 1
 - 4. 1 : 3

Question ID : **65497830680**
Status : **Answered**
Chosen Option : **3**

Q.7 The capacities of two hemispherical vessels are 2.7 litres and 12.5 litres. Find the ratio of the areas of the inner curved surfaces of the vessels.

- Ans**
- 1. 3 : 5
 - 2. 5 : 3
 - 3. 2 : 1
 - 4. 1 : 2

Question ID : **65497830699**
Status : **Answered**
Chosen Option : **1**

Q.8 The ratio of the number of girls and boys in a school is 8 : 7. If the percentage increase in the number of girls and boys is 10% and 20%, respectively, what will be the new ratio?

- Ans**
- 1. 14 : 19
 - 2. 22 : 21
 - 3. 20 : 23
 - 4. 13 : 11

Question ID : **65497830697**
Status : **Answered**
Chosen Option : **2**

Q.9 When 55 is subtracted from a number, it reduces to its 80%. Find four-fifth of the original number.

- Ans**
- 1. 240
 - 2. 220
 - 3. 210
 - 4. 180

Question ID : **65497830685**
Status : **Answered**
Chosen Option : **2**

Q.10 A shopkeeper bought 60 kg of rice at ₹42 per kg and mixed it with 120 kg rice at ₹52 per kg. At what rate (₹ per kg) should he sell the mixture to gain 20%?

- Ans**
- 1. ₹ 53.25
 - 2. ₹ 54.82
 - 3. ₹ 58.40
 - 4. ₹ 55.50

Question ID : **65497830696**
Status : **Answered**
Chosen Option : **3**

Q.11 An article was sold for ₹8800 which is $\frac{5}{7}$ of its cost price. The loss per cent is:

- Ans
- 1. $31\frac{6}{7}\%$
 - 2. $28\frac{4}{7}\%$
 - 3. $22\frac{5}{7}\%$
 - 4. $12\frac{3}{7}\%$

Question ID : 65497830682

Status : Answered

Chosen Option : 2

Q.12 Mukul lent ₹9,300 on simple interest in two parts. He earned interest at 5% per annum on the first part and at 8% per annum on the second part. The total interest he received after 4 years is ₹2,400. What is the ratio of the money lent at 5% to that lent at 8%?

- Ans
- 1. 5 : 8
 - 2. 8 : 5
 - 3. 15 : 16
 - 4. 16 : 15

Question ID : 65497830676

Status : Answered

Chosen Option : 4

Q.13 If $x : y = 5 : 2$, then what is $(8x - 9y) : (14x - 13y)$?

- Ans
- 1. 37 : 29
 - 2. 29 : 37
 - 3. 1 : 2
 - 4. 2 : 1

Question ID : 65497830679

Status : Answered

Chosen Option : 3

Q.14 If the difference between the simple interest and compound interest on a sum of money invested for 2 years at the rate of 15% per annum (interest compounded annually) is ₹225, then what is the sum?

- Ans
- 1. ₹8,000
 - 2. ₹9,500
 - 3. ₹10,000
 - 4. ₹9,000

Question ID : 65497830689

Status : Answered

Chosen Option : 3

Q.15 A man covers a certain distance at a speed of 60 km/h and returns at a speed of 40 km/h. What is his average speed (in km/h) for the entire journey?

- Ans**
- 1. 48
 - 2. 40
 - 3. 12
 - 4. 50

Question ID : 65497830678
 Status : Answered
 Chosen Option : 1

Q.16 The ratio of the monthly incomes of Ramu and Somu is 6 : 5 and the ratio of their expenditures is 7 : 6. At the end of the month, Ramu and Somu save ₹1,500 and ₹1,000, respectively. What is Ramu's monthly income?

- Ans**
- 1. ₹24,000
 - 2. ₹18,000
 - 3. ₹14,000
 - 4. ₹12,000

Question ID : 65497830688
 Status : Answered
 Chosen Option : 4

Q.17 If the average of the numbers 5, 7, 9, 12, 13, t, 20 is t, then what is the value of t?

- Ans**
- 1. 10
 - 2. 11
 - 3. 15
 - 4. 18

Question ID : 65497830687
 Status : Answered
 Chosen Option : 2

Q.18 The value of $\frac{3}{4} \div \frac{3}{4}$ of $\frac{3}{4} \times \frac{4}{3} + \frac{5}{2} \div \frac{2}{5}$ of $\frac{5}{4} - \left(\frac{2}{3} - \frac{2}{3}\right)$ of $\frac{5}{6}$ is:

- Ans**
- 1. $\frac{10}{3}$
 - 2. $\frac{11}{3}$
 - 3. $\frac{20}{3}$
 - 4. $\frac{22}{3}$

Question ID : 65497830681
 Status : Answered
 Chosen Option : 3

Q.19 What will be single discount equivalent to three successive discounts of 50%, 30%, and 20%?

- Ans
- 1. 68%
 - 2. 72%
 - 3. 75%
 - 4. 70%

Question ID : **65497830691**
 Status : **Answered**
 Chosen Option : **2**

Q.20 The mean of 15 measurements was calculated to be 50 cm. But it was found that one of the measurements was recorded as 46 cm instead of 61 cm. What is the correct mean (in cm)?

- Ans
- 1. 53
 - 2. 52
 - 3. 55
 - 4. 51

Question ID : **65497830690**
 Status : **Answered**
 Chosen Option : **4**

Q.21 Simplify the following expression.

$$\frac{\frac{3}{4} \text{ of } 1\frac{3}{5} - 1 \times 5 + 2}{24 - 6 \times 2} \div 4$$

- Ans
- 1. $-\frac{3}{80}$
 - 2. $-\frac{1}{192}$
 - 3. $-\frac{29}{720}$
 - 4. $-\frac{29}{240}$

Question ID : **65497830677**
 Status : **Answered**
 Chosen Option : **4**

Q.22 If the difference between two numbers is 42 and their LCM and HCF are 1729 and 7, respectively, what is the sum of those two numbers?

- Ans
- 1. 390
 - 2. 244
 - 3. 420
 - 4. 224

Question ID : **65497830686**
 Status : **Answered**
 Chosen Option : **4**

Q.23 The interest on a certain deposit at 3.5% per annum will be ₹210 in one year. How much will the additional interest in one year be on the same deposit at 4% per annum?

- Ans**
- ✓ 1. ₹30
 - ✗ 2. ₹49
 - ✗ 3. ₹45
 - ✗ 4. ₹36

Question ID : **65497830698**
Status : **Answered**
Chosen Option : **3**

Q.24 The list price of an article is ₹15,000. A trader wants to buy it. He has to choose one out of two discount series — one is 45%, 3%, and 2% and the other is 25%, 12% and 13% — on the list price. How many rupees can he save by choosing right series?

- Ans**
- ✓ 1. ₹770.55
 - ✗ 2. ₹771.55
 - ✗ 3. ₹773.55
 - ✗ 4. ₹772.55

Question ID : **65497830692**
Status : **Answered**
Chosen Option : **4**

Q.25 A car starts at a speed of 80 km/h, with its speed increasing by 8 km/h every two hours. In how many hours will it cover 432 km?

- Ans**
- ✗ 1. 6 hours 30 minutes
 - ✗ 2. 5 hours 30 minutes
 - ✓ 3. 5 hours
 - ✗ 4. 6 hours

Question ID : **65497830695**
Status : **Answered**
Chosen Option : **1**