

Section : Numerical Aptitude

Q.1 What is the mean proportional between the fourth proportionals of (1, 2, 7) and (14, 16, 2401)?

- Ans**
- 1. 224
 - 2. 196
 - 3. 14
 - 4. 392

Question ID : 65497817583
Chosen Option : 2

Q.2 X can do half and Y can do one-third of a certain work in 5 and 10 days, respectively. Working together, in how many days will they be able to complete double of the work?

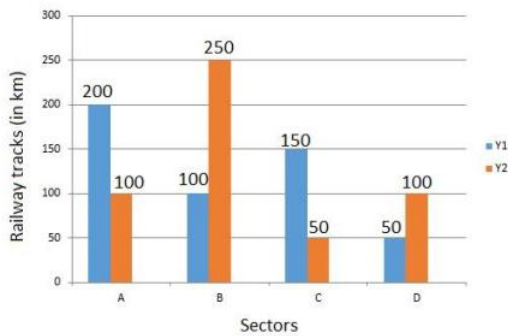
- Ans**
- 1. $16\frac{1}{2}$
 - 2. $7\frac{1}{2}$
 - 3. 15
 - 4. 16

Question ID : 65497817572

Chosen Option : 3

Q.3 Study the bar graph and answer the question that follows.

The extent of construction of new railway tracks (in km) in four railway sectors A, B, C, D during two consecutive financial years Y1 and Y2 is presented through the given bar graph.



How much is the percentage increase in the railway track length from Y1 to Y2 greater for B than that for D from Y1 and Y2?

- Ans**
- 1. 25
 - 2. 100
 - 3. 40
 - 4. 50

Question ID : 65497817594

Chosen Option : 4

Q.4 Simplify the following expression.

$$4 - 3 \text{ of } \left(1\frac{1}{2} + \frac{1}{3} \div \frac{1}{2} \text{ of } 4 - \frac{1}{4} \right)$$

- Ans
- 1. -8
 - 2. $\frac{17}{12}$
 - 3. $-\frac{1}{4}$
 - 4. $-\frac{19}{4}$

Question ID : 65497818097
Chosen Option : 3

Q.5 A retailer purchased 50 kg of a vegetable from a wholesale market. He sold half of it at a profit of ₹450, and the rest at a loss of ₹275. What was the difference (in ₹) between the two selling prices per kg of the vegetable?

- Ans
- 1. 29
 - 2. 18
 - 3. 7
 - 4. 12

Question ID : 65497817581
Chosen Option : 1

Q.6 The value of $5\frac{6}{29} - \left[\frac{15}{4} \div \left\{ \frac{3}{4} \times \left(\frac{3}{2} - \frac{1}{5} - \frac{1}{3} \right) \right\} \right]$ is:

- Ans
- 1. $\frac{2}{29}$
 - 2. $\frac{4}{29}$
 - 3. $\frac{3}{29}$
 - 4. $\frac{1}{29}$

Question ID : 65497815876
Chosen Option : 4

Q.7 Three jugs of equal capacity are filled with mixtures of milk and water in the proportions 3 : 1, 7 : 1 and 11 : 5. The three jugs are emptied into a single container. What will be the ratio of water to milk in the said container?

- Ans**
- 1. 14 : 45
 - 2. 11 : 37
 - 3. 12 : 41
 - 4. 15 : 49

Question ID : 65497817584
Chosen Option : 2

Q.8 While listing N consecutive even numbers for determining their average, the last number, by mistake, got replaced by the next odd number and thereby the average turned out to be more than the desired value by 0.0125. What is the value of N?

- Ans**
- 1. 80
 - 2. 40
 - 3. 50
 - 4. 100

Question ID : 65497817577
Chosen Option : --

Q.9 A sum of ₹16,000 invested at compound interest, amounts to ₹21,160 in two years. What is the rate per cent per annum?

- Ans**
- 1. 16.5
 - 2. 17.5
 - 3. 15
 - 4. 10

Question ID : 65497817585
Chosen Option : 3

Q.10 The lengths of one side and a diagonal of a rectangle are 63 cm and 65 cm, respectively. What is the perimeter (in cm) of a square whose area is one-seventh of that of the rectangle?

- Ans**
- 1. 36
 - 2. 64
 - 3. 24
 - 4. 48

Question ID : 65497817588
Chosen Option : 4

Q.11 Which number lying between 800 and 900 is such that when it is divided by either of 34 and 51, the remainder left is 19?

- Ans**
- 1. 887
 - 2. 821
 - 3. 835
 - 4. 869

Question ID : 65497817591
Chosen Option : 3

Q.12 A shopkeeper sells an article at 14% discount on its marked price and still gains 20%. If the cost price of the article is ₹184.90, then what is its marked price?

- Ans**
- 1. ₹264
 - 2. ₹272
 - 3. ₹278
 - 4. ₹258

Question ID : 65497817578
Chosen Option : 4

Q.13 The total surface area of a solid right circular cone is equal to that of a sphere of the same radius. The height of the cone is how many times the diameter of the sphere?

- Ans**
- 1. $\sqrt{2}$
 - 2. $\sqrt[3]{2}$
 - 3. $2\sqrt{2}$
 - 4. $\frac{\sqrt{2}}{2}$

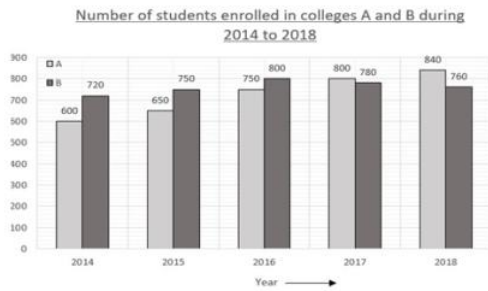
Question ID : 65497817590
Chosen Option : --

Q.14 x and y are two numbers having opposite signs such that, $x^2 : y^2 = 49 : 64$. What is the value of $(5x - 6y) : (6x - 7y)$?

- Ans**
- 1. 44 : 65
 - 2. 13 : 14
 - 3. 94 : 117
 - 4. 83 : 98

Question ID : 65497817582
Chosen Option : 4

Q.15 Study the given graph and answer the question that follows.



What is the ratio of the average number of students enrolled in college B in 2014, 2015 and 2017 to the number of students enrolled in college A in 2014?

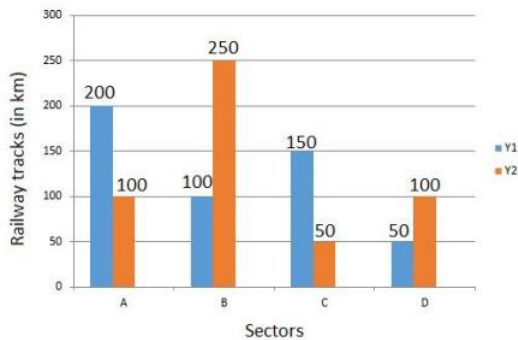
- Ans**
- ✓ 1. 5 : 4
 - ✗ 2. 15 : 16
 - ✗ 3. 3 : 2
 - ✗ 4. 5 : 3

Question ID : 65497817596

Chosen Option : 1

Q.16 Study the bar graph and answer the question that follows.

The extent of construction of new railway tracks (in km) in four railway sectors A, B, C, D during two consecutive financial years Y1 and Y2 is presented through the given bar graph.



How much is the average and track length (in km) of A, B, D during Y2 more or less than that of C in Y1?

- Ans**
- ✗ 1. 100 less
 - ✗ 2. 33.33 more
 - ✓ 3. Neither more nor less
 - ✗ 4. 50 less

Question ID : 65497817595

Chosen Option : 3

Q.17 At a recruitment test, the candidates were tested for General Awareness (GA) and Quantitative Techniques (QT). 54% and 45% failed in GA and QT, respectively, while 16% failed in both. If 136 candidates passed in both, what was the total number of candidates?

- Ans**
- 1. 800
 - 2. 640
 - 3. 600
 - 4. 850

Question ID : 65497817579
Chosen Option : 1

Q.18 During rainy season, huge inflow of water takes place into a reservoir. Measures are taken to clear the reservoir while water keeps flowing into it at a constant rate. It has been observed that seven and five men can clear the reservoir in 20 and 50 days, respectively, with the initial quantity of water in the reservoir being 24 and 36 kilolitres, respectively. What is the rate of inflow of water into the reservoir in litres per day?

- Ans**
- 1. 480
 - 2. 540
 - 3. 600
 - 4. 640

Question ID : 65497817573
Chosen Option : --

Q.19 The average of a number and its reciprocal is 1. What is the average of its square, cube and fourth power?

- Ans**
- 1. 2
 - 2. 1
 - 3. 1.33
 - 4. 2.67

Question ID : 65497817576
Chosen Option : 2

Q.20 The mean of a set of 120 observations is 80. 10 is subtracted from each observation and each of the corresponding result is divided by 7. What is the mean of the new set?

- Ans**
- 1. 7
 - 2. 10
 - 3. $5\frac{5}{6}$
 - 4. $7\frac{1}{12}$

Question ID : 65497817587
Chosen Option : --

Q.21 In case of a particular transaction, the profit earned is $14\frac{2}{7}\%$. What fraction is the cost price of the selling price?

- Ans**
- 1. $\frac{1}{7}$
 - 2. $\frac{8}{7}$
 - 3. $\frac{7}{8}$
 - 4. $\frac{1}{8}$

Question ID : 65497817580
Chosen Option : 3

Q.22 A man had to travel 49 km, which he divided into six stretches which were exact multiples of either 4 km or 5 km. The first four stretches were 4 km, 5 km, 8 km and 10 km. Multiples of 4 km and 5 km were travelled at the rates of 40 and 60 km/h, respectively, and between two consecutive stretches, he rested for six minutes. What was his average speed (in km/h) for the whole journey?

- Ans**
- 1. $31\frac{7}{11}$
 - 2. $32\frac{4}{13}$
 - 3. $33\frac{3}{8}$
 - 4. $34\frac{4}{15}$

Question ID : 65497817575
Chosen Option : --

Q.23 Three circles, each having radius equal to 4 cm, are drawn with the vertices of an equilateral triangle as the centres. If the length of each side of the triangle is equal to 8 cm, then what is the area (in cm^2) of the portion of the triangle that is NOT covered by the sectors of the circles?

- Ans**
- 1. $16(2\sqrt{3} - \pi)$
 - 2. $8(2\sqrt{3} - \pi)$
 - 3. $8\left(2\sqrt{3} - \frac{\pi}{2}\right)$
 - 4. $16\left(2\sqrt{3} - \frac{\pi}{2}\right)$

Question ID : 65497817589
Chosen Option : 2

Q.24 A man takes a loan of ₹6,000 from his friend on 1st January 2019 with the condition that he will repay with accrued simple interest at the rate 6.25%, as and when the interest touches ₹75. On which date does the loan period expire?

- Ans**
- 1. 14th February 2019
 - 2. 15th January 2020
 - 3. 20th October 2019
 - 4. 15th March 2019

Question ID : 65497817586

Chosen Option : 4

Q.25 A steamer and a motor boat cover the stretch between a seaport and a dock in 7 hours 20 minutes and 10 hours 40 minutes, respectively. What is the ratio of their speeds?

- Ans**
- 1. 15 : 11
 - 2. 3 : 2
 - 3. 16 : 11
 - 4. 8 : 5

Question ID : 65497817574

Chosen Option : 3

