

Section : Numerical Aptitude

Q.1 The value of  $18 - [6 - \{13 - (78 - 8 \div 2 \times 5 \text{ of } 3)\}]$  is:

- Ans
- 1. 12
  - 2. 7
  - 3. 8
  - 4. 16

Question ID : 65497814745  
Chosen Option : 2

Q.2 The value of  $1\frac{1}{8} \div 1\frac{4}{5}$  of  $\left[3\frac{1}{4} - \left(\frac{14}{25} + \frac{2}{5} \times 2\frac{4}{5} \div \frac{5}{3}\right)\right]$  of  $\frac{7}{15}$  is:

- Ans
- 1. 1
  - 2.  $\frac{1}{2}$
  - 3.  $\frac{1}{5}$
  - 4.  $\frac{3}{25}$

Question ID : 65497814746  
Chosen Option : 2

Q.3 A bus covers a certain distance in 1 hour 30 minutes at a speed of  $11\frac{1}{9}$  m/sec. A car covers the same distance in 36 minutes. What is the ratio of the speeds of the bus and car?

- Ans
- 1. 2 : 3
  - 2. 2 : 5
  - 3. 1 : 2
  - 4. 3 : 7

Question ID : 65497814761  
Chosen Option : 2

Q.4 The radius of a solid lead sphere is 2 cm. 2541 such spheres are melted and recast into a cube of edge  $x$  cm. The value of  $x$  is (take  $\pi = \frac{22}{7}$ ):

- Ans
- 1. 44
  - 2. 22
  - 3. 66
  - 4. 33

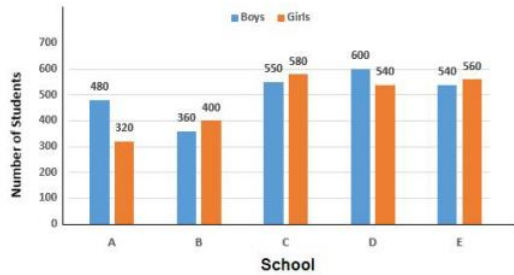
Question ID : 65497814462  
Chosen Option : 1

Q.5 The value of  $\frac{1}{5} \div \frac{3}{10}$  of  $\frac{4}{9} - \frac{4}{5} \times 1\frac{1}{9} \div \frac{8}{15} - \frac{3}{4} + \frac{3}{4} \div \frac{1}{2}$  is:

- Ans
- 1.  $\frac{5}{12}$
  - 2.  $\frac{11}{12}$
  - 3.  $\frac{1}{12}$
  - 4.  $\frac{7}{12}$

Question ID : 65497816683  
Chosen Option : 2

**Q.6** Study the given bar graph that shows the number of students (boys and girls) in different schools on 1 July 2019 and answer the question that follows.



75% of the total number of boys in schools A and D is what percentage less than the total number of students in school E (correct to one decimal place)?

- Ans**
- 1. 24.4%
  - 2. 35.8%
  - 3. 26.4%
  - 4. 20.6%

Question ID : 65497814768  
Chosen Option : 3

**Q.7** The ratio of the present incomes of X and Y is 5 : 8 and the ratios of their individual incomes, in the last year and in the present year, are 2 : 3 and 3 : 4, respectively. If their total income for the last year was ₹56,000, then what is the present income of Y?

- Ans**
- 1. ₹48,000
  - 2. ₹36,000
  - 3. ₹40,000
  - 4. ₹30,000

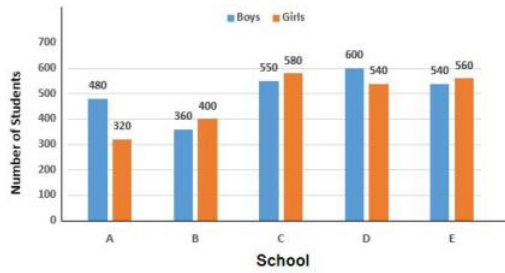
Question ID : 65497814756  
Chosen Option : --

**Q.8** The area of a triangular field with sides 60 m, 175 m and 185 m is equal to that of a rectangular park whose sides are in the ratio of 21 : 10. The perimeter (in m) of the park is:

- Ans**
- 1. 341
  - 2. 403
  - 3. 372
  - 4. 310

Question ID : 65497814763  
Chosen Option : 4

**Q.9** Study the given bar graph that shows the number of students (boys and girls) in different schools on 1 July 2019 and answer the question that follows.



If a pie chart is drawn for the data related to the number of girls in the five schools, then the central angle (in degrees) of the sector representing the number of girls in school C will be:

- Ans**
- ✓ 1. 87
  - ✗ 2. 60
  - ✗ 3. 81
  - ✗ 4. 84

Question ID : 65497814767

Chosen Option : 1

**Q.10** By selling an article for ₹1,122, there is a loss of 12%. If it is sold for ₹1,224, then what is the profit or loss percentage?

- Ans**
- ✓ 1. Loss, 4%
  - ✗ 2. Loss, 8%
  - ✗ 3. Profit, 4%
  - ✗ 4. Profit, 8%

Question ID : 65497814752

Chosen Option : 1

**Q.11** A person travelled a distance of 150 km and then returned to the starting point. The time taken for the outward journey was  $2\frac{1}{2}$  hours more than that for the return journey. His speed for the return journey was 10 km/h more than that for the outward journey. His speed for the return journey, in km/h, was:

- Ans**
- ✓ 1. 30
  - ✗ 2. 35
  - ✗ 3. 25
  - ✗ 4. 20

Question ID : 65497814762

Chosen Option : --

**Q.12** Twelve years ago, the ratio of the ages of A and B was 12 : 5. Twelve years from now, the ratio of their ages will be 18 : 11. What is the difference between their present ages (in years)?

- Ans
- 1. 28
  - 2. 24
  - 3. 25
  - 4. 30

Question ID : 65497814755  
Chosen Option : --

**Q.13** The marked price of an article is 35% above its cost price. After giving a 20% discount on the marked price, it is sold for ₹432. What is the cost price of the article?

- Ans
- 1. ₹400
  - 2. ₹380
  - 3. ₹425
  - 4. ₹420

Question ID : 65497814749  
Chosen Option : 1

**Q.14** When  $x$  is added to each of 7, 13, 19 and 29, the numbers so obtained in this order are in proportion. What is the mean proportional between  $(3x - 8)$  and  $(x + 5)$ ?

- Ans
- 1. 12
  - 2. 18
  - 3. 15
  - 4. 20

Question ID : 65497814754  
Chosen Option : --

**Q.15** A sum of ₹  $x$  amounts to ₹6,900 at 5% p.a. in a time in which a sum of ₹9,000 amounts to ₹10,080 at 4% p.a., both at simple interest. The value of  $x$  is:

- Ans
- 1. 6,400
  - 2. 5,800
  - 3. 6,000
  - 4. 6,500

Question ID : 65497814757  
Chosen Option : 3

**Q.16** A can do 40% of a work in 24 days, and B can do  $33\frac{1}{3}\%$  of the same work in 15 days. They work together for 15 days. C alone completes the remaining work in 10 days. A and C together can complete 35% of the same work in:

- Ans**
- 1. 7 days
  - 2. 6 days
  - 3. 8 days
  - 4. 5 days

Question ID : 65497814759  
Chosen Option : 2

**Q.17** A shopkeeper bought 600 pens. He sold 480 of them for the price he paid for 600 pens, 100 pens at 10% higher rate than that at which he sold 480 pens, and the rest at the cost price. His profit percentage in the transaction is:

- Ans**
- 1. 28.5%
  - 2. 27%
  - 3. 25%
  - 4. 26.25%

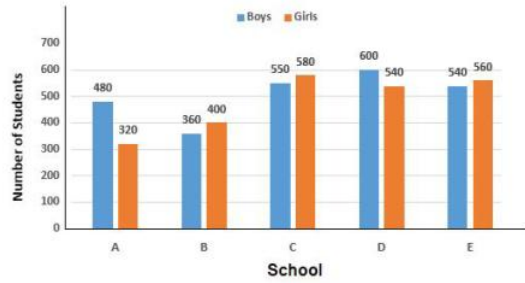
Question ID : 65497814753  
Chosen Option : --

**Q.18** A sum invested at compound interest amounts to ₹8,000 in 4 years and ₹8,400 in 5 years, interest being compounded yearly. What will be the amount of the same sum at the end of the 6<sup>th</sup> year?

- Ans**
- 1. ₹8,820
  - 2. ₹9,000
  - 3. ₹8,904
  - 4. ₹8,988

Question ID : 65497814758  
Chosen Option : 1

**Q.19** Study the given bar graph that shows the number of students (boys and girls) in different schools on 1 July 2019 and answer the question that follows.



In which school is the number of boys 25% more than the average number of girls in all five schools?

- Ans
- 1. A
  - 2. D
  - 3. C
  - 4. E

Question ID : 65497814766  
Chosen Option : 2

**Q.20** The ratio of the number of boys and girls in a class is 5 : 7. In English, the average score of boys is 48 and the average score of girls is 25% more than that of boys. What is the average score in English of all the boys and girls in the class?

- Ans
- 1. 56
  - 2. 52
  - 3. 55
  - 4. 54

Question ID : 65497814747  
Chosen Option : --

**Q.21** The average of the 3-digit numbers 372,  $2x5$  and  $x37$  is 498. What is the average of  $(2x + 7)$  and  $(5x - 2)$ ?

- Ans
- 1. 28
  - 2. 30.5
  - 3. 28.5
  - 4. 27

Question ID : 65497814748  
Chosen Option : --

**Q.22** The height of A is 20% more than that of B, and the height of B is 20% less than that of C. The height of C is 30% more than that of D. If the difference between the heights of C and A is 6.8 cm, then what is the height (in cm) of B?

- Ans
- 1. 136
  - 2. 135
  - 3. 132
  - 4. 140

Question ID : 65497814751  
Chosen Option : --

**Q.23** X can do a certain work in 40 hours. Y is 25% more efficient than X, and Z is 28% more efficient than Y. Working together, X, Y and Z will complete the same work in:

- Ans
- ✓ 1.  $\frac{800}{77}$  hours
  - ✗ 2.  $\frac{160}{9}$  hours
  - ✗ 3.  $\frac{400}{11}$  hours
  - ✗ 4.  $\frac{200}{13}$  hours

Question ID : 65497814760

Chosen Option : --

**Q.24** When 5054, 5906 and 7397 are divided by the greatest number  $x$ , the remainder in each case is the same. The sum of the digits of  $x$  is:

- Ans
- ✗ 1. 11
  - ✓ 2. 6
  - ✗ 3. 9
  - ✗ 4. 5

Question ID : 65497814744

Chosen Option : --

**Q.25** What is the mean of the mode and median of the given data?

5, 4, 6, 9, 3, 2, 5, 6, 7, 8, 9, 5, 7, 3

- Ans
- ✗ 1. 5
  - ✓ 2. 5.25
  - ✗ 3. 5.50
  - ✗ 4. 6

Question ID : 65497814750

Chosen Option : --

