

# Quant Section



10 out of 25 questions were new type...  
Available in Cetking blue books only.  
DI is more difficult than quant focus there!

Topic	Ques	Target	Yours	Source
Quant	10	5		Blue Books
Series	5	2		Blue Books
Data Suffici	5	4		Blue Books
Data Compar	5	4		Blue Books
	25	15		

1. The ratio of the number of students studying in Schools A, B and C is 4 : 8 : 3 respectively. If the number of students studying in each of the schools is increased by 80%, 20% and 60% respectively, what will be the new ratio of the number of students in Schools A, B and C. (a) 8 : 3 : 4 (b) 4 : 2 : 3 (c) 2 : 3 : 4 (d) Can't say (e) None of these

2. A person covered some distance in 24 hours. He covered half the distance by rail @ 75 km per hour and the rest by car @ 45 km/hr. The total distance covered by him was  
(a) 900 km (b) 1350 km (c) 675 km (d) 2700 km (e) None of these

3. A sum of Rs. 2135 is to be divided among A, B and C in such a way that 3 times A's share, 4 times B's share and 7 times C's share are all equal. The share of C is  
(a) Rs. 420 (b) Rs. 735 (c) Rs. 980 (d) Rs. 1200 (e) None of these

4. A person sold 160 mangoes for the C.P. of 200 mangoes. His gain percent is (a) 10% (b) 15% (c) 12½% (d) 25% (e) None of these

5. In how many different ways can the letters of the word DESIGN be arranged so that the vowels are at the two ends?  
(a) 48 (b) 72 (c) 36 (d) 24 (e) None of these

6. A certain fraction is equivalent to 3/5. If the numerator of the fraction is increased by 1 and the denominator is decreased by 1, the new fraction is equivalent to 2/3. What is the sum of numerator and denominator of the fraction? (a) 40 (b) 32 (c) 48 (d) 24 (e) 16

7. A shopkeeper sell his articles at cost price but uses 900 gm weight for 1200 gm weight. His profit percentage is  
(a) 33.33% (b) 25% (c) 16.66% (d) 20% (e) None of these

8. A car runs at the speed of 60 kms per hour when not serviced and runs at 72 kms/hr. when serviced. After servicing the car covers a certain distance in 12 hours. How much time will the car take to cover the same distance when not serviced?  
(a) 16.4 hours (b) 13 hours (c) 16 hours (d) 14.4 hours (e) None

9. The average of five positive numbers is 64. The average of the first two numbers is 59 and the average of last two numbers is 63. What is the third number? (a) 76 (b) 56 (c) 86 (d) 55 (e) None of these

10. The ratio of income of A and B is 5:4 and their expenditure is as 3:2. If at the end of the year, each saves Rs. 1200, then the income of A is  
(a) Rs. 2550 (b) Rs. 2700 (c) Rs. 3000 (d) Rs. 3300 (e) None of these

Directions: Find the value of missing number (?) in the given number series.

Series is part of

6. 17, 18, 26, 35, 99, ? (a) 224 (b) 124 (c) 148 (d) 164 (e) 225

7. 23, 40, 74, 142, 278, ? (a) 392 (b) 478 (c) 544 (d) 496 (e) 550

8. 69, 82, 71, 80, 73, ? (a) 78 (b) 77 (c) 79 (d) 83 (e) 86

9. 53, 58, 75, 112, 177, ? (a) 261 (b) 275 (c) 278 (d) 285 (e) 317

10. 23, 40, 64, 96, 137, ? (a) 197 (b) 188 (c) 183 (d) 192 (e) 201

Directions: In each of the following questions two equations are given. You have to solve them and give answer.

A) If  $x > y$  B) If  $x < y$  C) If  $x = y$  D) If  $x \geq y$  E) If  $x \leq y$

16. I.  $y^2 - 6y + 9 = 0$  II.  $x^2 + 2x - 3 = 0$

17. I.  $x^2 - 5x + 6 = 0$  II.  $2y^2 + 3y - 5 = 0$

18. I.  $x = \sqrt{256}$  II.  $y = (-4)^2$

19. I.  $x^2 - 6x + 5 = 0$  II.  $y^2 - 13y + 42 = 0$

20. I.  $x^2 + 3x + 2 = 0$  II.  $y^2 - 4y + 1 = 0$

Directions: Each of the questions given below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements sufficient to answer the question.

Give answer

(a) If the data in statement I alone are sufficient to answer

(b) If the data in statement II alone are sufficient to answer

(c) If the data in statement I alone or in statement II alone

(d) If the data in both the statements I and II are not sufficient

(e) If the data in both the statements I and II together needed

21. What is the salary of C, in a group of A, B, C, D and E, whose average salary is Rs. 48.250?

I. C's salary is 1.5 times B's salary.

II. Average salary of A and B is Rs. 23500.

22. What is the per cent profit earned by selling a car for Rs. 640000?

I. The amount of profit earned on selling the car was Rs. 320000.

II. The selling price of the car was twice the cost price.

23. What is the rate of interest p.c.p.a.?

I. An amount of Rs. 14350 gives a simple interest of Rs. 11480 in 4 yr.

II. The amount doubles itself in 5 yr with simple interest.

24. What is the two-digit number?

I. The difference between the two digits of the number is 9.

II. The product of the two digits of the number is 0.

25. What is the perimeter of the rectangle?

I. The area of the rectangle is 252 m<sup>2</sup>,

II. The ratio of length of breadth of the rectangle is 9 : 7, respectively.

New Type  
Data Comparison

# Quant Section



the rectangle.

Answers with explanation:

1. (e) Required ratio =  $(4 \times 180) : (8 \times 120) : (3 \times 160) = 3 : 4 : 2$
2. (b) Let the total distance be  $2D$ . Now,  $D/75 + D/45 = 24 \Rightarrow D = 675$   
Total distance =  $2 \times 675 = 1350$
3. (a)  $3A = 4B = 7C \Rightarrow A : B : C = 1/3 : 1/4 : 1/7 = 28 : 21 : 12$   
 $C$ 's share =  $12 / (28 + 21 + 12) \times 2135 = 420$
4. (d) Let CP of 200 mangoes = 200. SP of 16 mangoes = 200  
CP of 16 mangoes = 160. Profit% =  $(200 - 160) / 160 \times 100 = 25\%$
5. (a) Number of ways to arrange vowels =  $2!$ . Number of ways to arrange consonants =  $4!$ . Total number of arrangements =  $2! \times 4! = 48$
6. (a) Let the numerator and denominator be  $3x$  and  $5x$  respectively.  
Now,  $(3x+1)/(5x-1) = 2/3 \Rightarrow x = 5$ .  
Required sum =  $3x+5x = 8x = 40$
7. (a) Required profit% =  $(1200-900)/900 \times 100 = 33.33\%$
8. (d) Required number of hours =  $(72 \times 12)/60 = 14.4$
9. (a) Third Number =  $64 + (64 - 59) \times 2 + (64 - 63) \times 2 = 76$
10. (c) Let the incomes of A and B be  $5x$  and  $4x$  respectively.  
Now,  $(5x-1200)/(4x-1200) = 3/2 \Rightarrow x = 600$ . Income of A =  $5x = 3000$
11. c  $1/3$ rd of 45 min = 15 min = 9 km
12. b  $D = 120 + 120 = 240$  m.,  $t = 8$  s. Speed of slow train =  $s$ , faster =  $2s$ . Total speed =  $2s + s = 3s$ . So,  $3s = 240/8 = 30$  m/s.  
 $V = 30/3 = 10$  m/s.  $2V = 20$  m/s. or 72 km/hr
13. a Let average after 17th innings be =  $x$ . Total runs =  $17x$   
Average after 16th inning =  $x - 4$ . Total runs =  $16(x - 4)$   
Also,  $16(x - 4) + 96 = 17x \Rightarrow x = 32$
14. d  $D = x$  km. Speed upstream =  $30 - 10 = 20$  km/hr. Speed downstream =  $30 + 10 = 40$  km/hr  $\Rightarrow x/20 + x/40 = 3 \Rightarrow x = 40$  km
15. e Let Anil's age =  $x$ , Father age =  $x + 32$ , Anil's mother =  $(x - 3) + 27$ . So diff. =  $(x + 32) - (x - 3 + 27) = 8$

16. B
17. A
18. C
19. B
20. B

21. Ans.(d) Sol. Total salary of A, B, C, D, and E =  $48250 \times 5 = 241250$ .  
Statement I Let the salary of B =  $x$ . Then,  $C = 1.5x$   
Statement II total salary of A and B =  $23500 \times 2 = 47000$   
Then, the salary of A =  $(47000 - x)$   
From both statements, we can find the salary of D and E. So, data in both the statements I and II is not sufficient to answer the questions.

22. Ans.(c) Sol. From I, cost price =  $(640000 - 320000) = 320000$   
Profit percentage =  $320000/320000 \times 100 = 100\%$   
From II, if the cost price =  $x$ . Then selling price =  $2x \therefore$  Profit =  $2x - x = x$ . i.e. 100%  
So, data in statement I alone or in statement II alone is sufficient to answer the question.

23. Ans C.

24. Ans.(d) Sol. From I,  $x - y = 9$ . From II,  $x \times y = 0$   
This can be possible only, When  $x = 9$  and  $y = 0$ . Or,  $x = 0$  and  $y = 9$   
So, the data in both the statements I and II together are not sufficient to answer the question.

25. Ans.(e) Sol. From I,  $l \times b = 252$ . From II, ratio of length to breadth =  $9 : 7$ . From both statements we can find the perimeter of