**Quantative aptitude Test (set 2)**

**Company name: L&T infotech No. of Question: 15**

**1:**

A and B start a business with Rs 10,000 and Rs 6,000 respectively . After 3 months A takes out Rs 2000 from his investment and B adds Rs 4000 in his investment. After another 3 months C enters the business with Rs 15,000, If they earn a profit of Rs 31,500 after 1 year, then find the share of B in this profit?

1. 12530
2. 11340
3. 11580
4. 12950

**Answer :** option b

**Solution:**

Share of each person in ratio after cancelling the common terms

A’s share = 10000 ×3 + 8000 ×9 = 102

B’s share = 6000 ×3 +10000×9 = 108

C’s share = 15000×6=90

A:B:C = 102:108:90 → 17:18:15

B’s share =

**2:**

There are 3 sections of class tenth which constitute of 34, 45 and 52 students. If the average marks obtained by the three sections 61 , 59 and 42 respectively. Find the average marks of all the students combined?

1. 55.34
2. 51.25
3. 56.33
4. 52.77

**Answer :** option d

**Solution:**

Required average = =

**3:**

When the sum of the first 50 factorials is divided by 7 what will be the remainder?

1. 2
2. 3
3. 4
4. 5

**Answer :** option d

**Solution:**

We know that every term greater than 6! Will contain 7 and thus will not give any remainder so we will have to check only for the sum of first 6 factorials.

Sum = 1 + 2 +6 +24 +120 +720 = 873

When 873 is divided by 7 it will give a remainder of 5

**4:**

When a number is divided by 969 the remainder is 41. What will be the remainder when the number is divided by 19?

1. 3
2. 5
3. 9
4. 11

**Answer :** option a

**Solution:**

If we divide 969 by 19 we will get zero as a remainder, as 19×51=969.

So we will just divide 41 by 19 which will leave a remainder of 3.

**5:**

If 1.4a = .03b then find the value of ?

1. 144/137
2. 137/143
3. 141/139
4. 139/142

**Answer :** option b

**Solution:**

1.4a = .03b →

Putting value of b/a in the above expression to find the value

→

**6:**

Find the maximum value of the expression ?

1. 24
2. 21
3. 19
4. 27

**Answer :** option d

**Solution:**

We know that the maximum value of the expression is given by

SO the maximum value is

The other way to find the answer of this question is by differentiation.

**7:**

If the work done by (x-2) men in (x+6) days is same as the work done by (x+4) men in (x-1) days then value of x will satisfy which equation?

**Answer :** option a

**Solution:**

Solving for x

Putting value of 8 in the equations we will get option 1 as the correct answer.

**8:**

Two pipes can fill a tank in 12 hours and 15 hours respectively, if both the pipes are opened for 4 hours then first pipe is closed then find the time taken by the second pipe to fill the tank completely?

1. 5 hours
2. 5.5 hours
3. 6 hours
4. 6.5 hours

**Answer :** option c

**Solution:**

Let there be 60 units of work involved in filling the tank.

So first pipe does 5 units of work and second does 4 units of work

They are both opened for 4 hours so (5+4) ×4 = 36 units of work is done.

Remaining 24 units of work will be completed by second pipe in 24/4 = 6 hours.

**9:**

If two trains having equal lengths are running in the same direction at the speeds of 78 kmph and 88 kmph . The faster train passes the slower train in 72 seconds, find the length of the trains?

1. 100 m
2. 150 m
3. 200 m
4. 400 m

**Answer :** option a

**Solution:**

Relative speed is 88-78=10kmph

10 kmph =

Let the lengths of the trains be D

2D =

D= 100 m [length of each train]

**10:**

There are two vessels containing milk and water in the ratio 3:2 and 5:4, in what ratio must the contents of these vessels be mixed such that the resultant vessels contains milk and water in the ratio 7:5 ?

1. 3:5
2. 6:5
3. 4:3
4. 10:11

**Answer :** option a

**Solution:**

3/5 5/9

7/12

7/12 – 5/9 3/5 – 7/12

Required ratio = (21-20)/36 : (36-35)/60

Ratio = 1/36 : 1/60 → 3:5

**11:**

A man buy a bike for Rs 67,392 from a dealer at the rate of 8% p.a. such that by the end of 2 years he would have to pay two equal instalments . What is the value of each instalment ?[Find the approximate value]

1. 33,000
2. 32,000
3. 28,000
4. 30,000

**Answer :** option d

**Solution:**

By using the formula for instalments

→Instalment

→

**15:**

A milkman says that he sells his milk at the cost price but uses a false weight of 850 ml instead of 1 litres. Find his gain %?

**Answer :** option d

**Solution:**

Simply by using the formula =