

Q1: 1100 boys and 700 girls are examined in a test; 42% of the boys and 30% of the girls pass. The percentage of the total who failed is: [level 2, Accenture]

- a. 58%      b. 64%      c. 78%      d. 62 %

Ans: d

Soln: Total number of students = 1100 + 700 = 1800. Number of students passed = (42% of 1100 + 30% of 700) - (462 + 210) = 672. Number of failures = 1800-672 = 1128. Percentage failure =  $(1128/1800 * 100)\% = 62 \frac{2}{3}\%$ .

Q2: A student has to obtain 33% of the total marks to pass. He got 125 marks and failed by 40 marks. The maximum marks are: [Level 1, Wipro]

- a. 300      b. 500      c. 800      d. 1000

Soln:  $33\% = 125 + 40$

So,  $100\% = 500$

Q3. An article was purchased for Rs. 78,350. Its price was marked up by 30%. It was sold at a discount of 20% on the marked up price. What was the profit percent on the cost price? [Level 2, Wipro]

- 1) 2      2) 4      3) 8      4) 6

Ans: 2

Sol: If the cost price = 100, Marked price = 130

After a discount of 20%, SP = 104

So, Profit =  $104 - 100 = 4$  i.e. 4%

Q4. A student finds the average of 10 positive integers. Each integer contains two digits. By mistake, the boy interchanges the digits of one number say ba for ab. Due to this, the average becomes 1.8 less than the previous one. What was the difference of the two digits a and b? [Level 2, TCS]

- A. 8      B. 6      C. 2      D. 4

Ans: C

Solution: Let the original average be x.

$$100a+10b=10x$$

$$\text{Or, } 10a+b=x$$

Now, error done makes it

$$90a+9b+10b+a=(x-1.8)*10$$

$$\text{Or, } 91a+19b= 10x-18$$

So,  $a-b=2$  (After placing the value of x from above equation)

Q5. A sum of at S.I. money triples itself in 8 years at simple interest. Find in how many years will it become 8 times of itself at the same rate? [Level 2, Wipro]

- A. 24 years      B. 28 years      C. 30 years      D. 21 years

Ans: B

Solution:

If Principal is P.

$$\text{Then interest earned in 8 years} = 3P - P = 2P$$

So, interest of P will be earned in 4 years.

So, interest of 7P will be earned in 28 years.

Therefore, after 28 years P becomes 8P.

Q6. A policeman sees a thief at a distance of 150 m. He starts chasing the thief who is running at a speed of 5 m/sec, while the policeman chases with a speed of 7 m/sec. Find the distance covered by the thief when he is caught by the policeman. [Level 2, Accenture]

- 1) 285 m                      2) 325 m                      3) 375 m                      4) 295 m

Ans: 3

Solution

Given: The speed of the thief is = 5 m/sec

Speed of the policemen = 7 m/sec

The policeman sees the thief at a distance of 150 m.

Let the time taken by the policeman to catch the thief be x seconds.

According to the question,

$$7x = 150 + 5x$$

$$\Rightarrow x = 75 \text{ sec}$$

It will take the policemen 75 seconds to catch the thief.

So, the thief would have run  $75 \times 5 = 375 \text{ m}$

Q7. If a motorist had driven 1 hour longer on a certain day and at an average rate of 5 miles per hour faster, he would have covered 70 more miles than he actually did. How many more miles would he have covered than he actually did had he driven 2 hours longer and at an average rate of 10 miles per hour faster on that day? [Level 2, Infosys]

- A. 100                      B. 120                      C. 140                      D. 150

Ans: D

Solution:

The guy covered 70 miles more in an hour by driving 5 miles/hour faster. Therefore his speed current is 70 Miles/hr and his original speed was 65 Miles /Hr (since he is traveling 5Miles/Hr faster).

Therefore, his new speed is 75Miles/Hr (65+10) and he will travel 150 (75x2) Miles more in 2 Hours.

Q8. A man takes 8 hrs to go to a place on foot & to return by bike. If he goes both sides by bikes he will save 2 hrs. How much time he will take if he goes both sides on foot? [Level 2, Wipro]

- A. 8hrs                      B. 10hrs                      C. 12hrs                      D. 9hrs

Ans: B

Solution:

Difference of 2 hrs will be there if one goes with bike instead of walking from one place to another.

If he goes by walking both sides, it will take 2 hrs extra.

Q9. There are two containers of equal capacity. The ratio of milk to water in the first container is 3:1, in the second container 5:2, if they are mixed up, the ratio of milk to water in the mixture will be [Level 2, Accenture]

- A. 28:41                      B. 41: 28                      C. 15:41                      D. 41: 15

Ans: D

Solution:

Let the capacity of each container is 28 litres

In first container, milk = 21 litres, water = 7 litres (since, milk : water = 3: 1)

In second container, milk = 20 litres, water = 8 litres (since, milk : water = 5: 2)

Milk : Water (in the mixture) = (21+20): (7 + 8) = 41 : 15

Q10. A machine P can print one lakh books in 8 hrs, machine Q can print the same no of books in 10 hrs while machine R can print them in 12hrs. All the machines are started at 9 a.m. while machine P is closed at 11 a.m. and the remaining two machines complete the work. Approximately at what time will the work be finished? [Level 2, TCS]

A. 11:30 a.m.    B. 12 noon    C. 12:30 p.m.    D. 1 p.m.

Ans: D

Solution:

we have been given that a machine P can print one lakh books in 8 hours, machine Q can print the same number of books in 10 hours while R can print them in 12 hours. So, approximately it will take 2 hours after 11 a.m for machines to complete work i.e. 1 p.m.

Q11. Two pipes A and B can fill a cistern in 6 h working simultaneously. A takes 5 h more than that of B. How long will A take to fill the cistern? [Level 2, Accenture]

A. 12 h    B. 13 h    C. 14 h    D. 15 h

Ans: D

Solution:

Let A takes x hrs to fill it alone, then we will take (x – 5) hrs to fill it alone.

According to the question,

$$x(x-5)/(x + x -5) = 6$$

So, x = 15 hrs

Q12. A, B and C enter into a partnership in the ratio  $\frac{7}{2} : \frac{4}{3} : \frac{6}{5}$ . After 4 months, A increases his share 50%. If the total profit at the end of one year be Rs. 21,600, then B's share in the profit is:

[Level 2, Infosys]

A. Rs. 2100    B. Rs. 2400    C. Rs. 3600    D. Rs. 4000

Ans: D

Solution:

$$\text{Initial ratio of investment} = \frac{7}{2} : \frac{4}{3} : \frac{6}{5} = 105 : 40 : 36$$

Since ratio of profits = Ratio of investment x time

$$\text{Ratio of profits} = (105 \times 4 + (105 + 105/2) \times 8) : 40 \times 12 : 36 \times 12$$

$$= 1680 : 480 : 36 \times 12$$

$$= 140 : 40 : 36$$

$$= 35 : 10 : 9$$

$$\text{Share of B} = (21600/54) \times 10 = 4000$$

Q13. In a set of three numbers, the average of first two numbers is 2, the average of the last two numbers is 3, and the average of the first and the last numbers is 4. What is the average of three numbers? [Level 2, TCS]

A. 2    B. 2.5    C. 3    D. 3.5

Ans: C

Solution:

Since we are told the averages among the numbers we could do this;  
just add all the averages and divide by 3

$$a+b/2=2$$

$$b+c/2=3$$

$$a+c/2=4$$

$$\text{therefore the average of } a,b,c = (2+3+4/3) = 3$$

Q14. A man bought a number of clips at 3 for a rupee and equal number at 2 for a rupee. At what price per dozen should he sell them to make a profit of 20%? [Level 2, Wipro]

A. Rs. 4    B. Rs. 5    C. Rs. 6    D. Rs. 7

Ans: C

Solution:

Lets first calculate the cost price of a dozen oranges,

Since she bought equal quantities of both types of oranges, that will be 6 oranges of each type.

1st type : 2 oranges for Rs 1 , therefore 6 oranges for Rs 3

2nd type : 3 oranges for Rs 1, therefore 6 oranges for rs 2

Total cost : 3 + 2 = rs 5

S.P = rs 5 + 20 % profit i.e rs 6

Q15. Ratio of earnings of A and B is 4: 7. If the earning of A increase by 50% and those of B decrease by 25%, the new ratio of their earning becomes 8: 7. What are A's earnings? [level 2, Wirpo.

TechM]

A. Rs 21,000    B. Rs. 26,000    C. Rs. 28,000    D. Data Inadequate

Ans: D

Solution:

Let the initial earnings of A and B are 400x and 700x.

ATQ,  $(400x + 200x) : (700x - 175x) = 8 : 7$

So,  $600x : 525x = 8 : 7$

So, we cannot determine the value of x. Hence, we cannot determine the earnings.