

Q1. Evaluate 28% of 450 + 45% of 280 [Level 1, Wipro]  
 a. 250                      b. 251                      c. 252                      d. 253

Ans: c

Solution:

$$28\% \text{ of } 450 + 45\% \text{ of } 280 = 2 \times (28 \times 450) / 100 = 252$$

Q2. In a shop, a discount of 8% is provided. If the total payable after the discount is more than INR 5,000 and an additional discount of 20% is provided, then determine the final amount to be paid by the customer, if he buys 12 products each of price INR 750. [level 2, Accenture]

1) INR 6,724                      2) INR 6,624                      3) INR 6,424                      4) INR 6,524

Ans: 2

Solution:

$$\text{Price of 12 products} = 12 \times 750 = \text{Rs } 9000$$

After a discount of 8%, price = 8280 which is more than 5000

So, final payable amount after discount of 20% = Rs 6624

Q3. Find the principal if the interest-compounded at the rate of 10% per annum for two years is 420.

[Level 1, Microsoft, Capgemini]

A. 2000                      B. 2200                      C. 1000                      D. 1100

Ans: A

Solution:

$$420 = P(1 + 10/100)^2 - P$$

$$\text{So, } P = 2000$$

Q4. Three persons A, B and C divide a certain amount of money such that A's share is Rs.4 less than half of the total amount. B's share is Rs.8 more than half of what is left and finally C takes the which is Rs.14. Find the total amount they initially had with them? [Level 2, TCS]

A. Rs.61                      B. Rs.85                      C. Rs.80                      D. Rs.70

Ans: C

Solution: Let total = x

$$A = x/2 - 4, \text{ remaining amount} = x - (x/2 - 4) = x/2 + 4$$

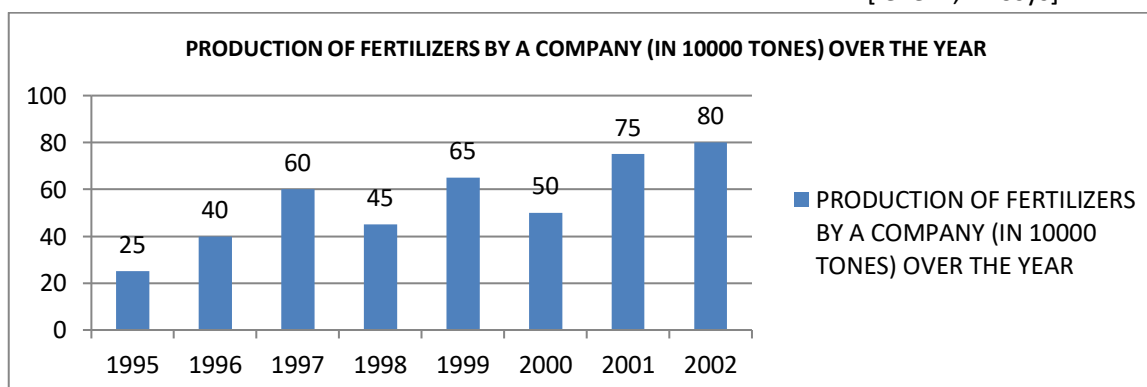
$$B = \frac{1}{2} (x/2 + 4) + 8, \text{ Remaining} = x/2 + 4 - [\frac{1}{2} (x/2 + 4) + 8] = x/4 - 6$$

According to question,  $x/4 - 6 = 14$

$$\text{So, } x = 80$$

Q5: Directions: Study the following bar graph & answer the following questions.

[level 2, Infosys]



In how many of the given years was the production of fertilizers more than the average production of the given years?

- a)1                      b)2                      c)3                      d)4

Ans: d

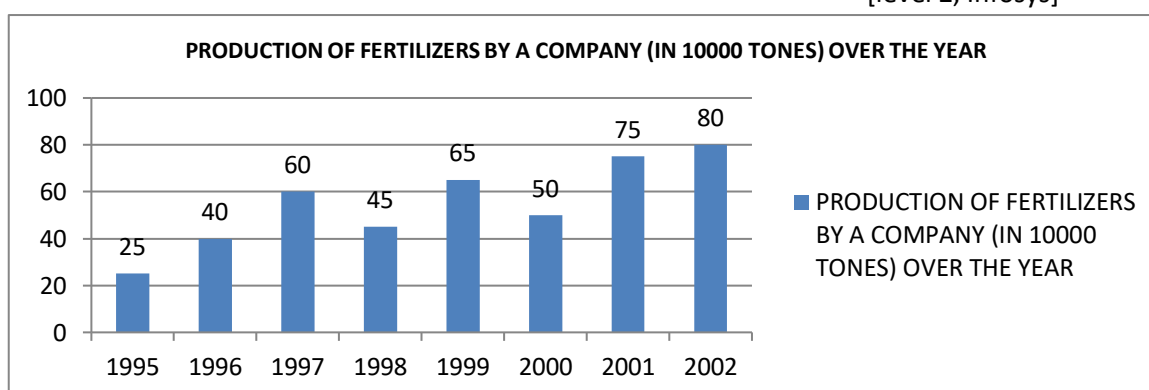
Solution:

Average production (in 10000 tonnes) over the given years =  $(25 + 40 + 60 + 45 + 65 + 50 + 75 + 80)/8 = 55$ .

Therefore, the productions during the years 1997, 1999, 2001 and 2002 are more than the average production.

Q6: Directions: Study the following bar graph & answer the following questions.

[level 2, Infosys]



The average production of 1996 and 1997 was exactly was equal to the average production of which of the following pair of years?

- a)2000 and 2001                      b)1999 and 2000                      c)1998 and 2000                      d)1995 and 2001

Ans: D

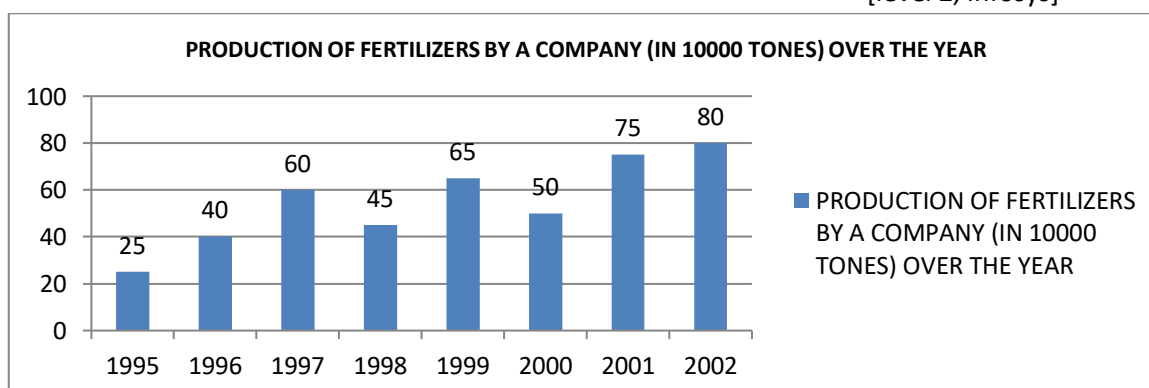
Solution:

Average production (in 10000 tonnes) of 1996 and 1997 =  $(40 + 60)/2 = 50$ .

Similarly, calculate the average production for the years given in the options and then compare.

Q7: Directions: Study the following bar graph & answer the following questions.

[level 2, Infosys]



What was the percentage decline in the production of fertilizers from 1997 to 1998?

- a)33.33%                      b)30%                      c)25%                      d)21%

Ans: C

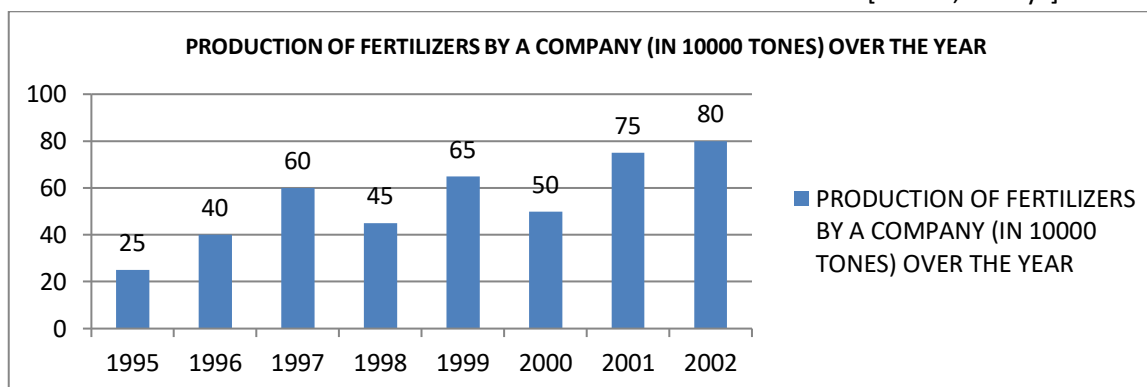
Solution:

Required percentage =  $[(45 - 60)/60] \times 100\% = -25\%$ .

Therefore, There is a decline of 25% in production from 1997 to 1998.

Q8: Directions: Study the following bar graph & answer the following questions.

[level 2, Infosys]



In which year was the percentage increasing production as compared to the previous year the maximum?

- a)2002                      b)2001                      c)1996                      d)1997

Ans: C

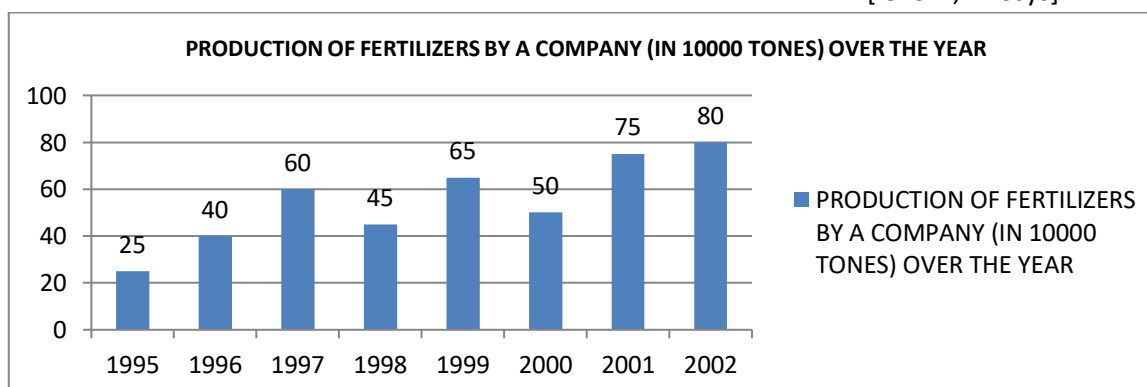
Solution:

The percentage increase in production compared to previous year for different years are:

$(\text{Change in production} / \text{Production during previous year}) \times 100\%$

Q9: Directions: Study the following bar graph & answer the following questions.

[level 2, Infosys]



What was the percentage increase in production of fertilizers in 2002 compared to that in 1995?

- a)320%                      b)300%                      c)220%                      d)200%

Ans: C

Solution:

Required percentage =  $[(80 - 25) \times 100] / 25\% = 220\%$ .

Q10. Two trains start from Delhi and Poona towards each other at 7 a.m. with speeds of 85 km/hr and 67 km/hr, respectively. If they cross each other at 3.30 p.m., the distance between the stations is:

[Level 2, Wipro]

- 1) 1245 km                      2) 1292 km                      3) 1283 km                      4) 1227 km

Ans: 2

Solution

Given,

Starting time = 7 am

Speed of first train = 85 km/hr

Speed of second train = 67 km/hr

Crossing time = 3:30 pm

We know, Speed = Total distance ÷ Time

According to the question,

Trains are moving in opposite directions.

Relative Speed = 85 + 67 = 152 km/hr

Now, the total time taken to cross each other = (7 am – 3:30 pm) = 8.5 hours

So, the total distance between the stations

= Relative Speed × Time Taken

= 152 × 8.5 = 1292 km

Hence, the correct answer is 1292 km.

Q11. A man travelled a certain distance by train at the speed of 50 km/hr and walked back the same distance at the speed of 10 km/hr. If the whole journey took 12 hours, then what was the distance travelled by train?

[Level 2, TCS]

- 1) 100 km                      2) 180 km                      3) 150 km                      4) 120 km

Ans: 1

Speed of train = 50 km/hr

Speed of walking = 10 km/hr

Total time for journey = 12 hours

Let the distance to be covered be d km.

Time taken by train = d/50

Time taken by walking = d/10

According to the question :

$d/50 + d/10 = 12$

So, d = 100 km

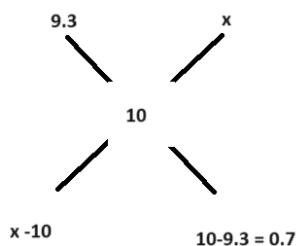
Q12. One quantity of wheat at Rs 9.30 per Kg is mixed with another quality at a certain rate in the ratio 8:7. If the mixture so formed be worth Rs 10 per Kg, what is the rate per Kg of the second quality of wheat?

[level 2, Wirpo. TechM]

- A. 12.47                      B. 10.80                      C. 15.17                      D. 47.66

Ans: B

Solution:



$$(x-10)/0.7 = 8/7$$

$$\text{So, } x = 10.8$$

Q13. A, B, C can complete a task in 6,8,12 days respectively. They completed the task together and they get Rs1350. What is share of B in it? [Level 2, Accenture]

- A. Rs 420                      B. Rs 450                      C. Rs430                      D. None of these

Ans: B

Solution:

Total work = LCM of 6, 8, and 12 = 24

Efficiency of A =  $24/6 = 4$

Efficiency of B =  $24/8 = 3$

Efficiency of C =  $24/12 = 2$

Share of B =  $3/(4 + 3 + 2) \times 1350 = \text{Rs } 450$

Q14. In an examination, there are five subjects and each has the same maximum. A boy's marks are in the ratio 3: 4 : 5 : 6 : 7 and his aggregate is  $3/5$  th of the full marks. In how many subjects did he get more than 50% marks? [Level 2, Accenture]

- A. 1                      B. 2                      C. 3                      D. 4

Ans: C

Solution:

Let's assume that the maximum marks are 100.

Total marks available = 500

Total marks obtained by all 5 together =  $3/5 \times 500 = 300$  which is divided in the ratio 3:4:5:6:7

Marks are 36, 48, 60, 72 and 84. Only 3 students get more than 50%

Q15. If  $17^x = 4913$ , find the value of  $2^{2x-1}$ . [Level 2, Wipro]

- a) 16                      b) 32                      c) 64                      d) 128

Ans: B

Solution:

$$17^x = 4913 = 17^3$$

$$\text{So, } x = 3$$

$$\text{And, } 2^{2x-1} = 2^{6-1} = 32$$