Honeywell Placement Paper

1. The cost of an apple is directly proportional to square of its weight in a fruit bazaar. Two friends A and B went there to purchase apples. A got exactly 5 apples per kg and each apple is of same weight. Where as B got exactly 4 apples per kg each weight is exactly same. If B paid Rs. 10 more than A per kg apples, what is the cost of an apple which weighs 1 kg?

A.120 B.150 C.200 D.none of these

Answer: C

Explanation:
It is given cost ∝ (weight)2 c = k w2. A got 5 apples per kg and each apple is of same weight. Each apple is 200 gm. = 1/5 kg. ∴ His cost per apple = k(1/5)2. Since, he will get 5 apples per kg, so his cost per kg = 5k(1/5)2 = k/5 Similarly, the cost per B is 4k(1/4)2. It is given 4k (k/4)2 – 5k (k/5)2 = Rs. 10. ⇒ k = 200 Our required answer is k (1)2 = Rs. 200.

2. The average of x successive natural numbers is N. If the next natural number is included in the group, the average increases by:-

A.Depends on x B.Depends on the starting number of the series C.Both (1) and (2) D.1/2

Answer: D

Explanation:
The average of consecutive numbers is the middle number. If one more number is added to the list, the middle number moves 0.5 towards right.

3. The 30 members of a club decided to play a badminton singles tournament. Every time a member loses a game he is out of the tournament. There are no ties. What is the minimum number of matches that must be played to determine the winner ?

A.15 B.29 C.61 D.None of these

Answer: B

Explanation:
Clearly, every member except one (i.e. the winner) must lose one game to decide the winner. Thus, minimum number of matches to be played = 30 - 1 = 29.

4. How many such pairs of letters are there in the word GUARDIAN each of which has as many letters between them in the word as in the English alphabet ?

A.One B.Two C.Three D.More than three

Answer: C

5. There are two classes A and B., each has 20 students. The average weight of class A is 38 and that of class B is 40. X and Y are two students of classes A and B respectively. If they interchange their classes, then the average weight of both the classes will be equal. If weight of x is 30 kg, what is the weight of Y?

A.40 B.45 C.50 D.52

Answer: C

Explanation:
Total weight of class A = 38 × 20, and class B = 40 × 20, if X & Y are interchanged, then the total ages of both the classes are equal. ⇒ 38 × 20 – x + y = 40 × 20 – y + x . 2(y – x) = 2 × 20, ⇒ y = x + 20 = 50

6. A certain sum of money invested at some rate of interest(S.I), triple it self in 4 years. In how many years the principal will become 9 times of itself at the same rate?

A.12 years B.15 years C.16 years D.none of these

Answer: C

Explanation:
When the principal is in simple interest the interest for every year will be same. In 3 years the amount becomes 3 times the principal and we have A = P + I. or 3P = P + I ⇒ I = 2P i.e. the interest is 2 time the principal in 4 years or equal to principal in 2 years. The interest will be equal to P in 2 years. So interest will be 8P in 16 years. Amount after 16 years = P + 8P = 9P. Hence the required answer will be 16 years

7. If a, a + 2, a + 4 are consecutive prime numbers. Then how many solutions 'a' can have?

A.one B.two C.three D.more than three

Answer: A

Explanation:
No even value of 'a' satisfies this. So 'a' should be odd. But out of three consecutive odd numbers, atleast one number is a multiple of 3. So, only possibility is a = 3 and the numbers are 3, 5, 7. Answer: (1)

8. Two numbers are greater than the third number by 25% and 20% respectively. What percent of first number is the second number?

A.92% B.94% C.96% D.98%

Answer: C

Explanation:
Assume the third number is 100. So the first number is 125 and the second number is 120. So the required answer is 120/125 × 100 = 96%.

9. The probability of two events A and B are 0.25 and 0.50 respectively. The probability of their simultaneous occurrence is 0.1. Find the probability that neither A nor B occurs.

A.0.32 B.0.39 C.0.42 D.none of these

Answer: B

Explanation:
We have P(A) = 0.25, P(B) = 0.50 and P(A ∩ B) = 0.14. Required probability = 1 – P(A ∪ B) = 1 – [P(A) + P(B) – P(A ∩ B)] = 1 – [0.25 + 0.50 – 0.14] = 0.39.

10. Mr. Johnson was to earn £ 300 and a free holiday for seven weeks' work. He worked for only 4 weeks and earned £ 30 and a free holiday. What was the value of the holiday?

A.£ 300 B.£ 330 C.£ 360 D.£ 420

Answer: B

Explanation:
Let the value of the holiday be x. Then, pay for seven week's work= 300+x So, [300+x] / 7 * 4 = 30+ x 1200+4x = 210+7x 3x = 990 x = 330

11. 84% of a particular total is 630 marks. What is 90% equal to?

A.750 B.675 C.450 D.550

Answer: B

Explanation:
The required answer is = 90 /84 * 630 = 675

12. The price of a trouser is marked 50% more than its cost price and a discount of 25% is offered on the marked price of the trouser by the shopkeeper. Find the percentage of profit/loss.

A.12 % B.12. 5 % C.15 % D.none of these

Answer: B

Explanation:
M.P = 1.5 C.P S.P = 0.75× 1.5 C.P = 1.125 C.P So profit percentage = 12.5 %.

13. The sum of three numbers in A.P. is — 3, and their product is 8. Find the numbers.

A.2, -1 , -4 B.-4, -1,2 C.Both (1) and (2) D.Data insufficient

Answer: C

Explanation:
Let the numbers be (a – d), a, (a + d). Then, Sum = – 3 ⇒ (a – d) + a + (a + d) = – 3 ⇒ 3a = – 3 ⇒ a = – 1 Product = 8 ⇒ (a – d) (a) (a + d) = 8 ⇒ a (a2 – d2) = 8 ⇒ (–1) (1 – d2) = 8 ⇒ d2 = 9 ⇒ d = ± 3 If d = 3, the numbers are – 4, – 1, 2. If d = – 3, the numbers are 2, – 1, – 4. Thus, the numbers are – 4, – 1, 2 or 2, – 1, – 4.

14. Aman won a competition and so he got some prize money. He gave Rs. 2000 less than the half of prize money to his son and Rs. 1000 more than the two third of the remaining to his daughter. If both they got same amount, what is the prize money Aman got?

A.25000 B.26000 C.27000 D.None of these

Answer: B

Explanation:
Assume Aman got x rupees. He gave x/2 - 2000 to his son. And 2/3 (x/2 + 2000) + 1000 to his daughter. x/2 - 2000 = x/3 + 7000/3 x = 26000

15. If 6 men can lay 8 bricks in one day, then how many men are required to lay 60 bricks in the same time?

A.45 men B.40 men C.32 men D.None of these

Answer: A

Explanation:
Since the time is same so to do more work we need more persons. Hence this is the problem of direct proportion, M1/B1 = M2/B2 M2 = (6* 60) /8 = 45 men

16. If I decrease my speed by 20% of original speed, I reach office 7 minute late. What is my usual time and new time of reaching office?

A.28 minutes B.35 minutes C.42 minutes D.None of these

Answer: B

Explanation:
Since speed is decreased by 20% i.e. 1/5 of the original. New speed will become 4/5 of the original speed. For the same distance, the time will become 5/4 of original time. Therefore new time increase by 4 1 of the original. This is given equal to 7 minutes. So Usual time = 7 × 4 = 28 minutes and New time = 28 + 7 = 35 minutes.

17. The cost of New Year party organized in TCS is directly related to the number of persons attending that party. If 10 persons attend the party the cost per head is Rs 250 and if 15 people attend, the cost per head is Rs. 200. What will be the total cost of the party if 20 persons attend it?

A.1500 B.2000 C.3500 D.None of these

Answer: C

Explanation:
This is the problem of direct relation Let the total cost of party is Cost = K1 + K2 N (where K1 & K2 are fixed and variable costs and N is number of persons) 250 x 10 = K1 + 10K2 ……(1) 200 x 15 = K1 + 15K2 ……(2) Solving them we get K1 = 1500 and K2 = 100 So total cost for 20 persons = 1500 + 20 x 100 = Rs. 3500

18. What is the smallest number of ducks that could swim in this formation - two ducks in front of a duck, two ducks behind a duck and a duck between two ducks ?

A.3 B.5 C.7 D.9

Answer: A

Explanation:
1 - 1 - 1

19. A is 3 years older to B and 3 years younger to C, while B and D are twins. How many years older is C to D?

A.2 B.3 C.6 D.12

Answer: C

Explanation:
Since B and D are twins, so B = D. Now, A = B + 3 and A = C - 3. Thus, B + 3 = C - 3 D + 3 = C-3 C - D = 6.

20. 12 year old Manick is three times as old as his brother Rahul. How old will Manick be when he is twice as old as Rahul ?

A.14 years B.16 years C.18 years D.20 years

Answer: B

Explanation:
Manick's present age = 12 years, Rahul's present age = 4 years. Let Manick be twice as old as Rahul after x years from now. Then, 12 + x = 2 (4 + x) 12 + x = 8 + 2x x = 4. Hence, Manick's required age = 12 + x = 16 years.

21. A tailor had a number of shirt pieces to cut from a roll of fabric. He cut each roll of equal length into 10 pieces. He cut at the rate of 45 cuts a minute. How many rolls would be cut in 24 minutes ?

A.32 rolls B.54 rolls C.108 rolls D.120 rolls

Answer: D

Explanation:
Number of cuts made to cut a roll into 10 pieces = 9. Therefore Required number of rolls = (45 x 24)/9 = 120.

22. In a class of 60 students, the number of boys and girls participating in the annual sports is in the ratio 3 : 2 respectively. The number of girls not participating in the sports is 5 more than the number of boys not participating in the sports. If the number of boys participating in the sports is 15, then how many girls are there in the class ?

A.20 B.25 C.30 D.Data inadequate

Answer: C

Explanation:
Let the number of boys and girls participating in sports be 3x and 2x respectively. Then, 3x = 15 or x = 5. So, number of girls participating in sports = 2x = 10. Number of students not participating in sports = 60 - (15 + 10) = 35. Let number of boys not participating in sports be y. Then, number of girls not participating in sports = (35 -y). Therefore (35 - y) = y + 5 2y = 30 y = 15. So, number of girls not participating in sports = (35 - 15) = 20. Hence, total number of girls in the class = (10 + 20) = 30.

23. There are deer and peacocks in a zoo. By counting heads they are 80. The number of their legs is 200. How many peacocks are there ?

A.20 B.30 C.50 D.60

Answer: D

Explanation:

Let x and y be the number of deer and peacocks in the zoo respectively. Then, x + y = 80 ...(i) and 4x + 2y = 200 or 2x + y = 100 ...(ii) Solving (i) and (ii), we get x = 20, y = 60.

24. A man wears socks of two colours - Black and brown. He has altogether 20 black socks and 20 brown socks in a drawer. Supposing he has to take out the socks in the dark, how many must he take out to be sure that he has a matching pair ?

A.3 B.20 C.39 D.None of these

Answer: A

Explanation:
Since there are socks of only two colours, so two out of any three socks must always be of the same colour.

25. A motorist knows four different routes from Bristol to Birmingham. From Birmingham to Sheffield he knows three different routes and from Sheffield to Carlisle he knows two different routes. How many routes does he know from Bristol to Carlisle ?

A.4 B.8 C.12 D.24

Answer: D

Explanation:
Total number of routes from Bristol to Carlisle = (4 x 3 x 2) = 24.

26. Study the following graph carefully and answer the questions given below. Expenditure and income of five families I&t2paper (Image)
Income of the family 'E' is approximately what percent of the income of the family B

A.64% B.48% C.50% D.57%

Answer: D

Explanation:
Income of the family E = 4000 Income of the family B = 7000 ∴ Percentage of income of E over the income of B =4000/7000 * 100 = 57.41%

27. Give the difference between average income and average expenditure of five families

A.2000 B.1800 C.1600 D.1400

Answer: B

Explanation:

We can observe that Average income of five families = 30000/5 = 6000 Average expenditure of five families = 21000/5 =4200 ∴ Difference = 6000 - 4200 = 1800

28. The income of 'D' is how many times greater than that of the income of 'E'

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

Answer: B

29. Give the ratio between the families having more income than expenditure and families having less income than expenditure

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

Answer: B

30. Give the family which spends more money than it earns ?

A.A B.B C.C D.D

Answer: C