1. Three taps P, Q, and R can fill a tank in 12 hrs, 15 hrs, and 20 hrs, respectively. If P is open all the time and Q and R are open for one hour each alternately, starting with Q, then the tank will be full in how many hours? (Wipro)

A) 9 hrs B) 7 hrs C) 13 hrs D) none of these

Hint: - Find the efficiency of each tap, then apply the alternating concept

Answer B

2. Twelve children take sixteen days to complete a work which can be completed by 8 adults in 12 days. After working for 3 days, sixteen adults left, and six adults and four children joined them. How many days will they take to complete the remaining work? (Infosys)

A) 3 days B) 2 days C) 6 days D) none of these

Hint: - From the given data,12 children work 16 days. One child's one day work = 1/192.

Answer C

8 adults 12 days work, One adult's one day's work = 1/96. Use the LCM method to solve the questions.

3. A pupil's marks were wrongly entered as 83 instead of 63. Due to that, the average marks for the class increased by half. The number of pupils in the class is : (Wipro)

A) 45 B) 40 C) 39 D) none of these

Hint: - Let there be x pupils in the class.

Total increase in marks = (x * 1/2) = x/2.

x/2 = (83 - 63) => x/2 = 20 => x = 40.

Answer B

4. A, B, and C rent a pasture. A puts 10 oxen for 7 months, B puts 12 oxen for 5 months, and C puts 15 oxen for 3 months for grazing. If the rent of the pasture is Rs. 175, how much must C pay as his share of rent? (Infosys)

A) Rs. 45 B) Rs. 50 C) Rs. 55 D) none of these

Hint: - A:B:C = (10×7):(12×5):(15×3) = 70 :60 :45 = 14 :12 :9

C's rent = Rs.(175×9/35) =Rs. 45.

Answer A

5. A began a business with Rs. 85,000. He was joined afterwards by B with Ks. 42,500. For how long a period does B join, if the profits at the end of the year are divided in the ratio of 31? (Wipro)

A) 4 months B) 5 months C) 8 months D) none of these

Hint: - Suppose B joined for x months. Then, (85000 * 12)/(42500 * x) = 3. or x = (85000 * 12) / (42500 * 3) = 8. So, B joined for 8 months.

Answer C

6. After 10 innings, the average score per innings of a batsman was 52. After 12 innings, the average rose to 54. If the batsman had scored 16 more runs in the 12th innings than in the previous one, how many runs did he score in the 11th innings? (Cognizant)

A) 55 B) 56 C) 54 D) none of these

Hint: - Use the average formula

Answer B

7. A water tank in a village is normally filled in 8 hours, but takes 2 hours longer to fill because of a leak in its bottom. If the tank is full, in how many hrs will the leak empty it? (Tech Mahindra)

A) 34 hrs B) 36 hrs C) 38 hrs D) none of these

Hint: - Use the basic concept of time and work

Answer D

8. A mixture of 150 liters of wine and water contains 20% water. How much more water should be added so that water becomes 25% of the new mixture? (Cognizant)

A) 10 liters B) 20 liters C) 30 liters D) none of these

Hint: - (30 + P) = 25% of (150 + P) Solving, we get P = 10 liters

Answer A

9. Find the highest 4-digit number that is divisible by 8. (Cognizant)

A) 9168 B) 9326 C) 9254 D) none of these

Hint: - The Last 3 digits should be divisible

Answer A

10. A, B, and C can complete a piece of work in 24,6 and 12 days respectively. Working together, they will complete the same work in (Tech Mahindra)

A) 1/24 days B) 7/24 days C) 24/7 days D) none of these

Hint: - (A+B+C)'s 1 day's work = (1/24 + 1/6 + 1/12) = 7/24

So, A, B, and C together will complete the work in 24/7 days.

Thus, B's money was used for 10 months.

Answer C

11. 19 persons went to a hotel for a combined dinner party. 13 of them spent Rs 79 each on their dinner, and the rest spent Rs 4 more than the average expenditure of all 19. What was the total money spent by them? (TCS)

A) 1628.4 B) 1534 C) 1492 D) None of these

Hint: - Let the average expenditure of 19 people be x

⇒19x = 13 X 79 + 6 X (x+4) ⇒19x = 13 X 79 + 6x +24⇒x = 80.84

So, total money spent by them = 1536.07

Answer D

12. Pipe K fills a tank in 30 minutes. Pipe L can fill the same tank 5 times as fast as pipe K. If both the pipes were kept open when the tank is empty, how much time will it take for the tank to overflow? (Infosys)

A) 3 minutes B) 2 minutes C) 5 minutes D) none of these

Hint: - Let the total capacity of the tank be 90 liters. The capacity of the tank is filled in 1 minute by K = 3 liters.

The capacity of the tank is filled in 1 minute by L = 15 liters. Therefore, the capacity of the tank filled by both K and L in 1 minute = 18 liters. Hence, the time taken by both the pipes to overflow the tank = 90/18 = 5 minutes.

Answer C

13. A is twice as efficient as B, and together they do the same work in as much time as C and D together. If C and D can complete the work in 20 and 30 days, respectively, working alone, then in how many days can A complete the work individually? (TCS)

A) 12 days B) 18 days C) 24 days D) none of these

Hint: - Therefore, ratio of efficiency of A:C = 10:9 Therefore, ratio of days taken by A:C = 9:10

Therefore, the number of days taken by A = 18 days

Answer B

14. How many kilograms of sugar costing Rs. 9 per kg must be mixed with 27 kg of sugar costing Rs. 7 per Kg so that there may be a gain of 10 % by selling the mixture at Rs. 9.24 per Kg? (TCS)

A) 36 Kg B) 42 Kg C) 63 Kg D) none of these

Hint:- Use the rule of allegation

Answer C

15. If a number 45678x9231 is divisible by 3, then how many values are possible for x? (Wipro)

A. 0 B. 9 C. 4 D) none of these

Hint:- Divisibility rule of 3

Answer C