1. A student got twice asA student got twice as many sums wrong as he got right. If he attempted 48 sums in all, how many did he solve correctly ? many sums wrong as he got right. If he attempted 48 sums in all, how many did he solve correctly ?

A.12   B.16   C.18   D.24

Answer: B

Explanation:

 Suppose the boy got x sums right and 2x sums wrong. Then, x + 2x = 48 3x = 48 x = 16.

2. A man fixed an appointment to meet the manager, Manager asked him to come two days after the day before the day after tomorrow. Today is Friday. When will the manager expect him?

A.Friday   B.Monday   C.Tuesday   D.Sunday

Answer: B

Explanation:

 Don't confuse it with Tuesday.the correct answer is Monday

3. There is a merry-go-round race going on.One person says,"1/3 of those in front of me and 3/4 of those behind me, give the total number of children in the race". Then the number of children took part in the race?

 A.12   B.11   C.13   D.14

Answer: C

Explanation:

 Assume there are x participants in the race. In a round race, number of participants in front of a person wil be x-1 and that behind him wil be x-1. i.e, 1/3(x-1) + 3/4(x-1) = x solving x = 13

4. Find the value of X,Y and Z in the following

X X X X

Y Y Y Y

Z Z Z Z

………………

Y X X X Z

A.X=9 , Y=2; Z=8   B.X=9 , Y=1; Z=9   C.X=8 , Y=1; Z=8

 D.X=9 , Y=1; Z=8

Answer: D

5. The smallest number which when diminished by 7, is divisible 12, 16, 18, 21 and 28 is:

A.1008   B.1015   C.1022   D.1032

Answer: B

Explanation:

 Required number = (L.C.M. of 12,16, 18, 21, 28) + 7 = 1008 + 7 = 1015

6. The ratio of two numbers is 3 : 4 and their H.C.F. is 4. Their L.C.M. is

 A.12   B.16   C.24   D.48

Answer: D

Explanation:

 Let the numbers be 3x and 4x. Then, their H.C.F. = x. So, x = 4. So, the numbers 12 and 16. L.C.M. of 12 and 16 = 48.

7. 252 can be expressed as a product of primes as:

  A.2 x 2 x 3 x 3 x 7   B.2 x 2 x 2 x 3 x 7

 C.3 x 3 x 3 x 3 x 7   D.2 x 3 x 3 x 3 x 7

Answer: A

Explanation:

 Clearly, 252 = 2 x 2 x 3 x 3 x 7.

8. 21, 9, 21, 11, 21, 13, 21, …….

A.14   B.15   C.21   D.23

Answer: B

Explanation:

 In this alternating repetition series, the random number 21 is interpolated every other number into an otherwise simple addition series that increases by 2, beginning with the number 9.

9. Two trains, one from Howrah to Patna and the other from Patna to Howrah, start simultaneously. After they meet, the trains reach their destinations after 9 hours and 16 hours respectively. The ratio of their speeds is

A.2 : 3   B.4 : 3   C.6 : 7   D.9 : 16

Answer: B

Explanation:

 Let us name the trains as A and B. Then, (A's speed) : (B's speed) = b : a = 16 : 9 = 4 : 3.

10. If a and b are positive integers and (a-b)/3.5 = 4/7, then

 A.b < a B.b > a   C.b = a   D.b >= a

 Answer: A

11. If 5 women or 8 girls can do a work in 84 days. In how many days can 10 women and 5 girls can do the same work ?

A.31 days   B.30 days   C.33 days   D.32 days

Answer: D

Explanation:

 Given that 5 women is equal to 8 girls to complete a work so, 10 women=16 girls. Therefore 10women +5girls=16girls+5girls=21girls. 8 girls can do a work in 84 days then 21 girls= (8*84/21)=32days. Therefore 10 women and 5 girls can a work in 32days

12. SECTION-1 If 9 men working 6 hours a day can do a work in 88 days. Then 6 men working 8 hours a day can do it in how many days?

 A.89   B.99   C.86 D.76

Answer: B

Explanation:

 If men is fixed,work is proportional to time. If work is fixed, then time is inversely proportional to men therefore, (M1*T1/W1)=(M2*T2/W2) From the above formula i.e (m1*t1/w1)=(m2*t2/w2) so (9*6*88/1)=(6*8*d/1) on solving, d=99 days.

13. walking at ¾ of his usual speed ,a man is late by 2 ½ hr. the usual time is

 A.7   B.7 ½   C.8 ½   D.8

Answer: B

Explanation:

 Usual speed = S Usual time = T Distance = D New Speed is ¾ S New time is 4/3 T 4/3 T – T = 5/2 T=15/2 = 7 ½

14. In a boat 25 persons were sitting. Their average weight increased one kilogram when One man goes and a new man comes in. The weight of the new man is 70kgs. Find the Weight of the man who is going ?

 A.45 B.25 C.36 D.73

Answer: A

Explanation:

 Weight increased per person is 1 kg. Total increase in weight = 25 kgs Weight of new man is 70 kgs, (Which means his weight is 25 kgs heavier) The weight of the old man was 70 – 25 = 45 kgs

15. A man can row 4.5 km/hr in still water. It takes him twice as long torow upstream as to row downstream. What is the rate of the current ?

A.3.5 km/hr   B.2.5 km/hr.   C.4.5 km/hr.   D.1.5 km/hr

Answer: D

Explanation:

Speed of boat in still water (b) = 4.5 km/hr. Speed of boat with stream (Down Stream), D = b + u Speed of boat against stream (Up stream), U = b − u It is given upstream time is twice to that of down stream. ⇒ Downstream speed is twice to that of upstream. So b + u = 2(b − u) ⇒ u =b/3 = 1.5 km/hr.

16. A sum of money amounts to Rs. 9800 after 5 years and Rs. 12005 after 8 years at the same rate of simple interest. The rate of interest per annum is

 A.5%   B.8%   C.12%   D.18%

Answer: C

Explanation:

 S.I. for 3 years = Rs. (12005 - 9800) = Rs. 2205. S.I. for 5 years = Rs. (2205/3) x 5 = Rs. 3675 Principal = Rs. (9800 - 3675) = Rs. 6125. Hence, rate = (100 x 3675)/(6125 x 5) % = 12%

17. A man starts walking at 3 pm . he walks at a speed of 4 km/hr on level ground and at a speed of 3 km/hr on uphill , 6 km/hr downhill and then 4 km/hr on level ground to reach home at 9 pm. What is the distance covered on one way?

A.12 km   B.23 km   C.45 km   D.65 km

Answer: A

Explanation:

 lets us consider t1 = time taken on level road. t2 = uphill. t3 = down hill; the distance traveled uphill and down hill same so t2*3 = 6*t3; => t2 = 2t3;---> (1) total time = 2*t1 + t2 + t3 = 6 hours ---> (2) 2t1+3t3 = 6 -->(3) total distance = 2*(4t1) + 3*t2+ 6*t3 ---> (4) substitute (1) in (4) 8t1 + 12t3 => 4(2t1+3t3) then from (3) the total distance will become 4*6= 24 => one way distance = 12km

18. In a group of cows and hens, the number of legs are 14 more than twice the number of heads. The number of cows is

A.5   B.7   C.10   D.12

Answer: B

Explanation:

Let the number of cows be x and the number of hens be y. Then, 4x + 2y = 2 (x + y) + 14 4x + 2y = 2x + 2y + 14 2x = 14 x = 7.

19. I have a few sweets to be distributed. If I keep 2, 3 or 4 in a pack, I am left with one sweet. If I keep 5 in a pack, I am left with none. What is the minimum number of sweets I have to pack and distribute ?

A.25   B.37   C.54   D.65

Answer: A

Explanation:

Clearly, the required number would be such that it leaves a remainder of 1 when divided by 2, 3 or 4 and no remainder when divided by 5.

20. 2 trains starting at the same time from 2 stations 200km apart and going in opposite direction cross each other at a distance of 110km from one of the stations.what is the ratio of their speeds ?

A.11:9   B.11:8   C.10:9   D.10:90

Answer: A

Explanation:

In same time ,they cover 110km & 90 km respectively so ratio of their speed =110:90 = 11:9

21. If 9x-3y=12 and 3x-5y=7 then 6x-2y = ?

A.-5   B.4 C.2 D.8

Answer: D

Explanation:

Consider 9x - 3y = 12.........divide both sides by 3: 3x - y = 4............now multiply both sides by 2: 6x - 2y = 8 So, it`s (d)

22. Two bus tickets from city A to B and three tickets from city A to C cost Rs. 77 but three tickets from city A to B and two tickets from city A to C cost Rs. 73. What are the fares for cities B and C from A ?

A.Rs. 4, Rs. 23   B.Rs. 13, Rs. 17   C.Rs. 15, Rs. 14   D.Rs. 17, Rs. 13

Answer: B

Explanation:

Let Rs. x be the fare of city B from city A and Rs. y be the fare of city C from city A. Then, 2x + 3y = 77 ...(i) and 3x + 2y = 73 ...(ii) Multiplying (i) by 3 and (ii) by 2 and subtracting, we get: 5y = 85 or y = 17. Putting y = 17 in (i), we get: x = 13.

23. The total of the ages of Amar, Akbar and Anthony is 80 years. What was the total of their ages three years ago ?

A.71 years   B.72 years   C.74 years   D.77 years

Answer: A

Explanation:

Required sum = (80 - 3 x 3) years = (80 - 9) years = 71 years.

24. A man took loan from a bank at the rate of 12% p.a. simple interest. After 3 years he had to pay Rs. 5400 interest only for the period. The principal amount borrowed by him was.

A.Rs. 2000   B.Rs. 10,000   C.Rs. 15,000   D.Rs. 20,000

Answer: C

Explanation:

Principal = Rs. (100 x 5400)/(12*3) = Rs. 15000.

25. The total age of A & B is 12 years more than the total age of B & C. C is how many year younger than A.

A.C is 12 years younger than A   B.C is 11 years younger than A

C.C is 18 years younger than A   D.C is 22 years younger than A

Answer: A

Explanation:

From the given data A+B = 12+(B+C) A+B-(B+C) = 12 A-C=12 years. C is 12 years younger than A

26. The present age of a father is 3 years more than three times the age of his son.Three years hence,father as age will be 10 years more than twice the age of the son.Find the present age of the father.

A.23 years   B.30 years   C.33 years D.42 years

Answer: C

Explanation:

Let the present age be 'x' years. Then father's present age is 3x+3 years. Three years hence (3x+3)+3=2(x+3)+10 x=10 Hence father's present age = 3x+3 =[(3 x 10) + 3] = 33 years.

27. In one hour a boat goes 11 km long the stream and 5 km against the stream.The speed of the boat in still water is?

A.8 kmph   B.7 kmph   C.8.5 kmph   D.9 kmph

Answer: A

Explanation:

Speed in still water A = ½ (11+5) km/hr A= 8 kmph

28. A train 110 m long travels at 60 kmph. How long does it take to pass a telegraph post by the side of the track ?

A.5.6 seconds   B.6.5 seconds   C.6.6 seconds   D.6.7 seconds

Answer: C

Explanation:

Speed of train = 60 ×5/18 m/s = 50/3 m/s ∵ Time taken to cross the telegraph post = 110/(50/3) = 6.6 seconds

29. The average ages of three persons is 27 years. Their ages are in the proportion of 1:3:5. What is the age in years of the youngest one among them ?

 A.8   B.6   C.7   D.9

Answer: D

Explanation:

 Let the age of three persons be x, 3x and 5x => 9x/3 = 27 = > x = 9

30. The greatest number of four digits which is divisible by 15, 25, 40 and 75 is:

 A.9000   B.9400   C.9600   D.9800

Answer: C

Explanation:

 Greatest number of 4-digits is 9999. L.C.M. of 15, 25, 40 and 75 is 600. On dividing 9999 by 600, the remainder is 399. Required number (9999 - 399) = 9600.