1. **Jithu is now 12 years younger than Madhav. If 9 years from now Madhav will be twice as old as Jithu, how old will Jithu be in 4 years?**

A. 5
B. 6
C. 7
D. 8

Answer – C. 7
Explanation:
Let us assume the Age of
Jithu =x years, then Madhav = x+12 years
Given that 9 from now,
2(x+9)=x+21
2x+18=x+21
x=3
x+4 = 7 years

2. **At present, the respective ratio between the ages of X and Y is 3:4 and that between X and Z is 1:2. six years hence, the sum of X, Y and Z will be 96 years. what is the present age of X?**

A. 18 years
B. 19 years
C. 20 years
D. 21 years

Answer – A. 18 years
Explanation:
Given that
The ratio between X, Y and Z is = 3:4:6
The sum of the present age of X, Y and Z = 96 – 18 = 78
13a = 78
a = 6
Present age of X = 3a = 18

3. **Sampath can complete the job in 12 hrs. Arjun can complete the job in 8 hrs. If Sampath worked for 6 hrs then quit. How many hours will Arjun alone take to complete the remaining work?**

A. 3 hrs
B. 4 hrs
C. 5 hrs
D. 7 hrs

Answer - B. 4 hrs
Explanation:
Let time taken to complete the work = x
Then, 6/12+x/8= 1
12+3x = 24
3x = 12
x =4

4. **A man takes 20 minutes to row 12 km upstream which is a third more than the time he takes on his way downstream. What is his speed in still water?**

A. 41 km/hr
B. 36 km/hr
C. 42 km/hr
D. 45 km/hr

Answer - C. 42 km/hr
Explanation:
Let the speed in still water = x km/hr.
Takes 20 min to row 12 km upstream ⇒ speed of u/s = 36 km/hr.
Also, a time taken for u/s is 1/3 more than for d/s.
Therefore, distance covered in d / s will be 1/3 more.
Hence distance covered by man for d / s in 20 min. = 12 × (12/3) = 16 km.
So, speed of d/s = 48 km/hr.
x + y = 48 and x – y = 36
By solving the above two equations we will get
x = 42 km/hr.

5. **A boat goes 12 km upstream in 48 minutes. The speed of a stream is 2 km/hr. The speed of the boat in still water is**

A. 17 km/hr
B. 18 km/hr
C. 19 km/hr
D. 20 km/hr

Answer - A. 17 km/hr
Explanation:
Given that
12 km upstream in 48 min.
It will cover 15 km in 1 hr.
Speed of stream = 2 km / hr.
Therefore, Speed of boat in still water = 15 + 2 = 17 km/hr.

6. **Mahendra can do a work in 15 days. After working for 3 days he is joined by Vikas. If they complete the remaining work in 3 more days, in how many days can Vikas alone complete the work?**

A. 5 days
B. 10 days
C. 15 days
D. 20 days

Answer – A. 5 days
Explanation:
Total days Mahendra worked = 3+3 = 6
6/15 = 2/5
So 3/5 = 3/x
x = 5

7. **X can type 100 letters in 5 minutes. Y and Z typing together can type 50 letters in 2 minutes. If all of them working together then can type 90 letters in how many minutes?**

A. 2 minutes
B. 4 minutes
C. 5 minutes
D. 10 minutes

Answer – A. 2 minutes
Explanation:
According to the given data
(1/5+1/4)
20/9*90/100 = 2 mins

8. **The proportion of copper and zinc in the brass is 13:7. How much zinc will there be in 100 kg of brass?**

A. 14 kg
B. 20 kg
C. 35 kg
D. 40 kg

Answer - C. 35 kg
Explanation:
Given that the proportion of copper and zinc in the brass is 13: 7
Hence, 7/20 * 100 = 35

9. **P, Q, and R play a cricket match. The ratio of the runs scored by them in the match is P: Q = 2:3 and Q: R = 2:5. If the total runs scored by all of them are 75, the runs scored by Q are?**

A. 15
B. 18
C. 21
D. 24

Answer - B. 18
Explanation:
Given that
P: Q = 2:3
Q: R = 2:5
By solving P: Q: R = 4:6:15
6/25 * 75 = 18

10. **The ratio of M and N is in the ratio 5: 8. After 6 years, the ratio of ages of M and N will be in the ratio 17: 26. Find the present age of N.**

A. 60
B. 65
C. 72
D. 75

Answer - C. 72
Explanation:
M/N = 5/8 , M+6/N+6 = 17/26
Solve both, N = 72

11. **The incomes of Raghu and Vishwanath are in the ratio 1: 2 and their expenditures are in the ratio 2: 5. If Raghu saves Rs 20,000 and Vishwanath saves Rs 35,000, what is the total income of Raghu and Vishwanath?**

A. Rs 30,000
B. Rs 50,000
C. Rs 70,000
D. Rs 90,000

Answer - D. Rs 90,000
Explanation:
Let, Income of Raghu= x, of Vishwanath = 2x
Expenditure of Raghu = 2y, of Vishwanath = 5y
Savings is (income – expenditure). So
x – 2y = 20,000
2x – 5y = 35,000
By solving the above two equations you will get x = 30,000
So total = x+2x = 3x = 3*30,000 = 90,000
Therefore, the total income of Raghu and Vishwanath = Rs 90,000.

12. **Two taps can separately fill a cistern 10 minutes and 15 minutes respectively and when the waste pipe is open, they can together fill it in 18 minutes. The waste pipe can empty the full cistern in?**

A. 7 min
B. 9 min
C. 12 min
D. 15 min

Answer - B. 9 min
Explanation:
According to the given data
1/10 + 1/15 - 1/x = 1/18
x = 9

13. **If a pipe P can fill a tank 3 times faster than pipe Q and takes 32 minutes less than pipe P to fill the tank. If both the pipes are opened simultaneously, then find the time taken to fill the tank?**

A. 12 minutes
B. 14 minutes

C. 15 minutes
D. 16 minutes

Answer – A. 12 minutes
Explanation:
3x – x = 32
x = 16
1/16 + 1/48 = 4/48
Time taken to fill the tank = 48/4 = 12 minutes

14. **Pipe M can fill a tank in 16 minutes and pipe N cam empty it in 24 minutes. If both the pipes are opened together after how many minutes should pipe N be closed so that the tank is filled in 30 minutes?**

A. 20
B. 21
C. 22
D. 23

Answer - B. 21
Explanation:
Let the pipe N be closed after x minutes.
30/16 - x/24 = 1
=> x/24 = 30/16
=> x = 14/16 * 24 = 21.

15. **A pipe can fill a cistern in 8 hours. After half the tank is filled, three more similar taps are opened. What is the total time taken to fill the cistern completely?**

A. 3 hours
B. 2 hours
C. 4 hours
D. 5 hours

Answer – D. 5 hours
Explanation:
One hour pipe can fill = 1/8
Time is taken to fill half of the tank = 1/2 * 8 = 4 hours
Part filled by four pipes in one hour = (4*1/8) = 1/2
Required Remaining Part = 1/2
Total time = 4 + 1 = 5 hours

16. **What amount would Rs.2560 fetch if it is lent at 8% SI for 15 years?**

A. Rs.3072
B. Rs.4632
C. Rs.5072
D. Rs.5632

Answer – D. Rs.5632
Explanation:
Simple Interest (SI) = 2560*8*15/100 = 3072
Amount = 2560+3072 = 5632

17. **The length and breadth of a rectangle are increased by 20% and 30%. The area of the resulting rectangle exceeds the area of the original rectangle?**

A. 50%
B. 56%
C. 65%
D. 156%

Answer - B. 56%
Explanation:
(120/100) ×(130/100) ×100=156.
156-100=56.

18. **If x is 20% more than y, then by what percent y is smaller than x.**

A. 40/3 %
B. 46/3 %
C. 47/3 %
D. 50/3 %

Answer – D. 50/3 %
Explanation:
x = 120y/100 or x = 6y/5
y = 5x/6.
Percentage by which y is smaller
Then x is [(x – 5x/6)/x]*100 = 50/3 %

19. **In an election, the votes between the winner and loser candidate are in the ratio 5:1. If a total number of eligible voters is 1000, out of which 12% did not cast their vote**

and among the remaining vote 10% declared invalid. What is the number of votes the winning candidate get?

A. 620
B. 630
C. 640
D. 660

Answer – D. 660
Explanation:
Given that Ratio between winner and loser 5:1
Total number of votes casted actually = 1000*(88/100)*(90/100) = 792
5x + x = 792, x =132
Hence, Votes of winner candidate = 5*132 = 660

20. **If the positions of the digits of a two digit number are interchanged, the number obtained is smaller than the original number by 27. If the digits of the number are in the ratio of 1:2, what is the original number?**

A. 16
B. 32
C. 63
D. 82

Answer – C. 63
Explanation:
Original number – 10x + y
(10x + y) – (10y + x) = 27
9(x – y) = 27
x – y = 3
y/x = 1/2
x = 2y
y = 3, x = 6
Now, Original number = 10x + y = 10(6) + 3 = 63.