

1. Ages of two persons differ by 16 years. If 6 year ago, the elder one be 3 times as old the younger one, find their present age

- A. 16, 32
- B. 18, 34
- C. 12, 28
- D. 14, 30

Answer - D. 14, 30 Explanation: Let us assume, the age of the younger person is x. So, elder person age is (x+16) According to the given information 3(x-6) = (x+16-6) [6 years before]=> 3x-18 = x+10=> x = 14. Therefore, Present age of elder personage is x + 16 = 30

2. Three years from now, Bhavana will be three times as old as Anitha and Anitha will be six years younger than Manju. If Bhavana's age is three years less than twice Manju's age, how old is Manju?

A. 27 B. 20 C. 15 D. 9

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Answer – D. 9
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Explanation:

B+3=3(A+3) [Bhavana will be three times as old as Anitha]

=>A+3=(M+3)-6 ------I

B=2M-3 [Bhavana's age is three years less than twice Manju's age]

By solving the equation I

A+3=M-3 or A=M-6.

B+3=3(M-6+3)

B+3=3M-9

B=3M-12.

now, we have B=2M-3.

2M-3=3M-12

M = 9
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3. Johny is now 12 years younger than Mukesh. If 9 years from now Mukesh will be twice as old as Johny, how old will Johny be in 4 years?

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

Answer – C. 7 Explanation: Let us assume Johny's age was x years Johny = x years, Mukesh = x+12 years 9 from now 2(x+9) = x+212x+18 = x+21x=3x+4 = 7 years

4. The ratio between Ramesh and Vamsi is 4:3, After 6 Years Ramesh age will be 26 years. What is Vamsi's present age?

A. 14 years B. 15 years C. 20 years D. 22 years

Answer - B. 15 years Explanation: The present age is 4x and 3x, => 4x + 6 = 26=> x = 5Therefore, Vamsi age is = 3(5) = 15 years

5. The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

A. 4 years B. 8 years C. 10 years

D. 12 years



Answer - A. 4 years Explanation: Let the ages of children be x, (x + 3), (x + 6), (x + 9) and (x + 12) years. Then, x + (x + 3) + (x + 6) + (x + 9) + (x + 12) = 50 5x = 20 x = 4. Hence, Age of the youngest child = x = 4 years.

6. Chandu went shopping to buy a Mobile, the shopkeeper asked him to pay 18% Tax if he wants a bill. If not you can get a 7% discount on the actual price of the mobile. Then Chandu decided not to take the bill and paid Rs. 4650. By this how much money could Chandu save on purchasing mobile?

A. Rs.350 B. Rs.650 C. Rs.850 D. Rs.1250

Answer – D. Rs.1250 Explanation: SP\*93/100 = 4650 SP = 5000 Including tax= 5000+900 = 5900 Therefore, Saving = 5900-4650 = 1250

7. A trader sells Rice to a customer at a profit of x% over the cost price, besides if he cheats his customer by giving 950gm instead of 1kg. Thus his overall percentage is 20%. Then what is the value of x?

A. 10 B. 12 C. 14 D. 15 Answer – C. 14 Explanation: 1000\*(100+x/100) = 950\*120/100 x = 14%

8. I make a profit of 20% by selling an article. What would be the profit percent if it were calculated on the selling price instead of the cost price?



A. 10 %

B. 20%

C. 30%

D. 16.67%

Answer - D. 16.67% Explanation: Let us assume Cost Price = 100 Then SP = 120. Profit % if it was calculated on SP will be => 20/120 = 16.67%

9. A does half as much work as B does in one-sixth of the time. If together they take 20 days to complete the work, then what is the time taken by A to complete the work independently.

A. 60/3 days

B. 80/3 days

C. 100/3 days

D. 140/3 days

Answer – B. 80/3 days

### Explanation:

Let us assume B complete the work in x days So in one day work done by B is 1/xA do half work in one-sixth of the time Then, A will complete work in  $2^{*}x/6 = x/3$  days One day work of A and B that is 3/x + 1/x = 1/20. Hence, we get x = 80 So time taken by A alone = 80/3 days

10. Three pipes X, Y, and Z can fill a Cistern in 6 hours. After working at it together for 2 hours, Z is closed and X and Y can fill the remaining part in 7 hours. The number of hours taken by Z alone to fill the Cistern is?

A. 14 hours

- B. 12 hours
- C. 15 hours
- D. 18 hours

Answer – A. 14 hours



#### **Explanation:**

Part filled in 2 hours = 2/6 = 1/3Remaining Part = (1-1/3) = 2/3(X + Y)'s 7-hour work = 2/3(X + Y)'s 1-hour work = 2/21Z's 1 hour work = (X + Y + Z) 1 hour work – (X + Y) 1 hour work = (1/6 - 2/21) = 1/14 = 14 hours Therefore, Pipe Z alone can fill the Cistern in 14 hours.

11. A large cistern can be filled by two pipes P and Q in 15 minutes and 20 minutes respectively. How many minutes will it take to fill the Cistern from an empty state if Q is used for half the time and P and Q fill it together for the other half?

A. 18 minutesB. 17 minutesC. 12 minutesD. 19 minutes

Answer – C. 12 minutes Explanation: Part filled by P and Q = 1/15 + 1/20 = 7/60Part filled by Q = 1/20x/2(7/60 + 1/20) = 12 minutes

12. A man can row at 4 kmph in still water. If the velocity of the current is 1 kmph and it takes him 1 hour to row to a place and come back. how far is that place?

A. 1.5 km B. 1.8 km C. 2.6 km D. 3.2 km Answer - B. 1.8 km Explanation: Let us assume the distance is x km Rate downstream = 4 + 1 = 5 kmph Rate upstream = 4 - 1 = 3 kmph then x/5 + x/3 = 1 3x + 5x = 15x = 15/8 = 1.8 km



# 13. The speed of a boat in still water in 12 km/hr and the rate of current is 4 km/hr. The distance travelled downstream in 12 minutes is?

- A. 2.7km
- B. 3.2km
- C. 4.7km
- D. 5.1km

Answer - B. 3.2km Explanation: Speed downstream = (12 + 4) kmph = 16 kmph. Distance travelled = 16 \*12/60 km = 3.2 km

14. The weights of 19 people are in Arithmetic progression. The average weight of them is 19. If the heaviest is 37 Kgs. Then what is the weight of the Lightest?

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

**Answer –** A. 1 Kg **Explanation:** 19\*19 = 19/2(2a+18d) 38= 2a+18d 37 = a+18d a = 1 Therefore, the weight of the Lightest is 1 Kg.

15. The length of a rectangle is reduced by 30%. By what percent would the width have to be increased to maintain the original area?

A. 25% B. 32.76% C. 35.50% D. 42.86%

Answer – D. 42.86% Explanation: Width = 30\*100/100-30 = 3000/70 = 42.86%



16. Smallest side of a right-angled triangle is 6 cm less than the side of a square of perimeter 60 cm. Second largest side of the right-angled triangle is 4 cm less than the length of a rectangle of area 80 sq. cm and breadth 5 cm. What is the largest side of the right-angled triangle?

- A. 9 cm
- B. 10 cm
- C. 12 cm
- D. 15 cm

Answer – D. 15cm Explanation: Side of first square = 60/4 = 15 cm. Smallest side of right angled triangle= 15 - 6 = 9 cm. Length of 2nd rectangle = 80/5 = 16 cm. Second largest side of the 1strectangle = 16-4 = 12 cm. Therefore, Largest side = hypotenuse= $\sqrt{9^2+12^2=15}$  cm