

1. one pipe fills in 4 hrs and another in 5hrs when they both work alternately how much time will be taken to fill the tank.
2. LCM of 3 no's is 120 which of the following no must not be their HCF
a. 8 b.24 c.12 d.24 e. 30
3. Two trains from the points A and B moving in opposite direction , at the point they meet the second train travels 120 kms more than the first. The speeds are 50kmph and 60kmph respectively find the distance between A and B?
4. One monkey climbs a poll at the rate of 6mts/min and fell down 3mts in the alternately. Length of the poll is 60 mtrs , how much time it will take to reach the top?
a. 31 b.33 c.37 d.40 (ans: 37)
5. a number when multiplied by $\frac{7}{18}$ instead of $\frac{7}{8}$ and got the result 770 less than the actual result , find the original number?
6. The volume and the radius of both cone and sphere are equal , then find the ratio of height of the cone to the diameter of the sphere?
7. A and B started a business with 1500 and 2500 and got a profit 800 rs. Half of the profit is shared equally the remaining is shared according to their investment. Find their profits.
8. The difference between the simple interest and compound interest for 2 years?
A:B =2:3 and B:C=5:6 then find A:B:C
9. an amount of 64 Rs has to become 125 in 3 years in compound interest , find the rate of interest?
10. a similar to the above problem find the time(rate of interest is given)
11. the prime no., which is greater than 6 when divide by 6 will always gives the remainder
ans: 1 or 5
12. Length of a rectangle is increased by 50% and breadth is decreased by 25% what is the difference in the area
13. Mr X position in a class is 13th from first and 17th from last, and 8th from the first and 13th from last in passed candidates list, then how many candidates failed in the exam

14. Two successive discounts of 20% and 15% is equal to a net discount of

15. A two digit number is 4 times to its sum of digits , when 9 is added to the number, the digits will get reversed. Then what is that number?

Ans: 12

16. The length of the following rectangle is '4a' and its breadth is '2a'. Radius of the two circles is 'a'. Then find the ratio of total area of the rectangle to the area not covered by the two circles with in the rectangle

17. A person starts with the speed of $u/1$ kmph and returns with the speed of $u/2$ kmph, what is his average speed.

18. A cistern will be filled in 9 hrs, but becoz of an outlet it is filled in 10 hrs, if the cistern is filled, then how much time the outlet takes to empty the cistern.

19. In a right angled triangle ABC angle B = 90 , BM is the median to AC , then $AB^2 + BC^2$ (in terms of BM)

20. Three circles with same radius r are drawn with centres as three vertices of a triangle. What is the sum of areas of the intersections of these circles with the triangle.