

1. 
$$x^{2a} = y^{2b} = z^{2c} x^2 = yz$$
  $x,y, z \neq 0$  Find (ab+bc+ca)/bc



2. If Principal amount 4300 become 4630 in two years. Then at same interest rate what principal will amount to 10140 in 5 years Simple interest.



3. The number of days taken by A,B,C to do a work separately are 10,15 and 20 days. If B and C work for 3 days, the remaining work will be completed by A in how much time.



4. If MP = 2245 and discount of 28% is given there is profit of 12%. Find CP



5. If 
$$x-y = 4$$
,  $xy=45$ , Find  $x^3-y^3 = ?$ 



6. The ratio of radius of 2 cylinder is 3:4 Ratio of heights equal 4:9. Find ratio of volume.



7. If 
$$A + B = 45^{\circ}$$
, find  $2(1+\tan A)(1+\tan B)$ 



8. 
$$x = 4\cos A + 5\sin A$$
  
 $y = 4\sin A - 5\cos A$ 

Find  $x^2 + y^2$ 



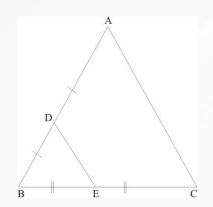
9. Length of rectangle is increased by 40% breadth is decreased by 20%. Find change in Area



10. A person sells some articles at 10% loss. If he sells them at 20% profit. He will earn 332 Rs. extra. Find original SP.



11.



area  $\triangle$  ABC = 44 area  $\triangle$ BDE =?



12. 
$$x+y=8$$
,  $y+2=13$ ,  $z+x=17$  find  $\frac{x^2}{y^2}=?$ 



13. 6 tan A = 5 
$$\frac{8 \sin A - 4 \cos A}{\cos A - 2 \sin A}$$
=?



14. If 1005x4 is divisible by 8 the find x



15. A train crosses a pole in 18sec.if same train crosses a bridge of 170cm in 36 seconds. Then find speed train?



16. If S.I for 3 years at 5% is 1200 then find the compound interest for same rate and same time?



17. Find the length of the chord which is at 3 cm distance from the centre of the circle whose radius is 5cm



18.If A can do a work in 25 days and B can do it in 20 days. B left after working for 4 days. Find the number of days A will complete the remaining work.



19. A shopkeeper marked up an article by 40 % and then gave the discount of 20%. Find the overall profit.



20. Find the curved surface area of hemisphere which has radius of 7 cm.



21. Two Boys with speeds of 100m/min and 120m/min run a race. The faster boy takes 10 minutes less than the other. Find the distance of the Race.



22. Find the value (tan30+tan60)/cos30



23. A person sell an article at 25% profit. If CP is increased by 20% and SP is increase by 10%. Find new profit.



24. If the rate of interest is 10% per annum and the compound interest for 2.33 years is 1322. Find the principal



25. A can do a piece of work in 40 days. Efficiency of B is 25% more than the A. Efficiency of C is 28% more than A. If three of them worked for 5 days. Find the number of days B will take to complete the remaining work.



26. A shopkeeper Marks up the price by 40%. If he gives successive discounts of 20% and 25%. Find the overall profit percentage.



