

**PT – 3 WORK SHEET**  
**MATHEMATICS**  
**CLASS VIII**

1. Write down the squares of :  $8m - \frac{1}{2}$
2. If  $x + \frac{1}{x} = 12$ , find the value of:  $\left[ x + \frac{1}{x} \right]^2$
3. Find the product :  $(x+3)(x-3)(x^2 + 9)$
4. Using the identity for difference of two squares, find the product of  $51 \times 49$
5. Find the value of x, if :  $13x = (58)^2 - (45)^2$
6. Find the product, using identity:  $(100 + 3)(100 + 2)$
7. Multiply  $(4x^2 + 3y)$  by  $(3x^2 - 4y)$  and verify the result for  $x = 1, y = 2$
8. If  $x + y = 9$  and  $xy = 16$ , find the value of  $(x^2 + y^2)$ .
9. Evaluate :  $\frac{4.359 \times 4.359 - 1.641 \times 1.641}{4.359 - 1.641}$
10. A person sells an article for Rs 550, gaining one-tenth of its C.P. Find gain percent.
11. A toy was sold at a gain of 12% . Had it been sold for Rs 33 more ,the would have been 14% .  
Find the cost price of the toy
12. After allowing a discount of 12% on the marked price of an article , it is sold for Rs 880. Find its marked price.
13. List price of a pair of shoes is Rs 450. If Amit paid Rs 45 as VAT for it, find the rate of VAT.
14. A music system is available for Rs 13750 including VAT. If the rate of VAT is 10%, find the original cost of the system.
15. Simple interest on a sum of money for 3 years is at  $6\frac{1}{4}\%$  per annum is Rs 2400. What will be the compound interest on that sum at the rate for the same period.
16. The population of a town 2 years ago was 62500. Due to migration to cities , it decreases every year at the rate of 4% per annum. Find its present population.
17. The present population of a city is 9261000. If it has been increasing at the rate of 5% per annum, find its population x years ago.
18. In a factory production of scooters rose to 48400 from 40000 in 2 years. Find the rate of growth per annum.
19. The value of a flat worth Rs 5000000 is depreciating at the rate of 10% per annum . In how many years will its value be reduced to Rs 3645000?
20. Construct a histogram for the following data:

Monthly school fee (in Rs) :	30-60	60-90	90-120	120-150	150-180	180-210	210-240
No of schools:	5	12	14	18	10	9	4