

***Welland Gouldsmith School,  
Patuli***

Class - VIII

Subject - Mathematics

Topic - Exponents & Power

1] Simplify and write the answer in the exponential form

i)  $(2^5 \div 2^8)^5 \times 2^{-5}$

ii)  $(-3)^4 \times (5/3)^4$

iii)  $(3^2)^3 \div (6^3)^2$

iv)  $(2^{12} \div 2^7) \times 9^{-5}$

2] Simplify :

i)  $(-7)^3 \div (-7)^6 \times (-7)^5$

ii)  $2^{-4} \times 9^3 \times 4$

iii)  $(3^0 \div 6^0) \div 9^0$

iv)  $[3^{-1} + 4^{-1} + 5^{-1}]^2$

v)  $\{(1/3)^{-2} - (1/2)^{-3}\} \div (1/4)^{-2}$

vi)  $(5^{-1} \times 2^{-1}) \div 6^{-1}$

vii)  $\frac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$

viii)  $(5/9)^{-2} \times (3/5)^{-3} \times (3/5)^0$

3] Find x if  $(2/3)^{-2} = (3/2)^4 \times (2/3)^x$

4] Write the numbers using scientific notation

i) 0.000578

ii) 450000

5] Find m for which  $9^m \div 3^{-2} = 9^4$

6] Simplify :

$$3^{-5} \times 3^2 \div 3^{-6} + (2^2 \times 3)^2 + (2/3)^{-1} + 2^{-1} + (1/19)^{-1}$$