Worksheet -3

Mahesh Public School

Class-8th

Chapter-Exponents

Exponents-Exponents are numbers expressed as repeated multiplication

$3x3x3x3x3 = 3^5$

It is read as '3 raised to the power 5'

Law of exponents

1) $p^m \times p^n = p^{m+n}$

$2^3 \times 2^7 = 2^{3+7}$

2) $P^m \div P^n = p^{m-n}$

$6^{11} \div 6^8 = 6^{11-6}$

3) $(p^m)^n = p^{mn}$

$(8^{12})^3 = 8^{12 \times 3}$

4) $P^m \times q^m = (pq)^m$

$3^5 \times 2^5 = 6^5$

5) $p^m \div q^m = (\frac{p}{q})^m$

$8^7 \div 9^7 = (\frac{8}{9})^7$

Q1. Write the following in exponential form:-

a) 6×6×6×6

b) -5 ×-5 ×-5×-5 × -3 ×-3×-3

Q2. Evaluate the following-

a) $(\frac{-3}{5})^5$ b) $(\frac{-2}{9})^2 \times (\frac{3}{5})^3 \times (\frac{1}{6})^0$

Worksheet -4

Mahesh Public School

Class -8th

Chapter – Exponent

Q1. Simplify-

a) $(\frac{9}{8})^{-5} \times (\frac{9}{8})^{-3}$

b) $(\frac{-5}{7})^{-8} \div (-\frac{-5}{7})^{-3}$

c) $(\frac{-3}{5})^{-4} \times (\frac{-10}{9})^{-4}$

Q2. Express the following with positive exponents-

a) $(\frac{1}{3})^{-5}$

B) $(\frac{3}{4})^{-3}$

c) $(\frac{-5}{7})^{-3}$

Q3. Find the value of the following-

a) $(\frac{2}{4})^{-8}$

b) $(\frac{4}{6})^{-10}$

c) $(\frac{2}{7})^{-5}$

Q4. Find the reciprocal of the following-

a) $(4)^{-2}$

b) $(-3)^{-14}$

c) $(\frac{2}{5})^{-6}$