

The City School

North Nazimabad Boys Campus

E-Worksheet



Teacher's Name: SHAMEELA ALVI

Class:8 Subject: Mathematics

Date:3rd March 2017

Topic: Algebraic Manipulation

Q1.Simplify each of the following.

a) $\frac{(-3x^2y^4)}{(9xyz)^5}$

b) $\frac{(5x^3y^4)^3}{25xy^2}$

c) $\frac{(-4ab^3c)^3}{-16a^4bc^5}$

d) $\frac{5a^3b(x+y)}{10a(x+y)^2}$

e) $\frac{15x^3(a-b)^4}{35xy(a-b)^2}$

f) $\frac{4a+8b}{6a+12b}$

g) $\frac{a^2+b^2}{a^2-b^2}$

h) $\frac{x^2-4x}{x^2-16x}$

i) $\frac{ab-b^2}{(a-b)^2}$

j) $\frac{8a^2-16ab}{5a-10b}$

k) $\frac{a^2-4a}{a^2-4}$

l) $\frac{3p^2}{qr} \times \frac{6q^2}{21rq} \times \frac{28r^2}{3pq}$

m) $\frac{4x^2 - y^2}{12x^2 - 4xy - y^2}$

n) $\frac{5x-15}{3x^2-13x+12}$

o) $\frac{(a+b)^2}{(b+c)^2 - a^2}$

p) $\frac{(2x-3y)^2}{6x^2-9xy}$

q) $\frac{16a^2b^4}{7c^2b} \times \frac{21b^4c^3}{24a^3b^3}$

r) $\frac{4a^2b}{3abc} \times \frac{27b^2c^3}{16a^4}$

s) $\frac{6xy^2}{7z} \times \frac{56x^3}{48yz}$

t) $\frac{2a^2b}{3c} \div \frac{3abc}{8c^3}$

u) $\frac{14a^3b}{6xy} \div \frac{63ax^2}{24b^2y^3}$

v) $\frac{18x^4y^3}{14x^2y} \div \frac{27xy^5}{21yz^3}$

w) $\frac{2x^2y^3}{7az^3} \div \frac{4x^2z}{21a^2z} \times \frac{3a}{8xy}$

x) $\frac{(a+b)}{2x} + \frac{3a-b}{3x} - \frac{b-a}{5x}$



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