Pakistan School
Kingdom of Bahrain

Welcome Class 10th (Arts)

Algebraic Formulas and Applications

Objectives

Students will be able to:

Reduce the given algebaric expression to lowest terms

Reduce the given rational expression to lowest terms

Q.9 $\dfrac{8x^2y^2}{12x^4y}$

Sol. $= \dfrac{2y^{2-1}}{3x^{4-2}}$

$= \dfrac{2y}{3x^2}$

Q.12 $\dfrac{18m^5x^3}{27m^4x^8 - 36m^6x^6}$

Sol. $= \dfrac{18m^5x^3}{9m^4x^6(3x^2 - 4m^2)}$

$= \dfrac{2m^{5-4}}{x^{6-3}(3x^2 - 4m^2)}$

$= \dfrac{2m}{x^3(3x^2 - 4m^2)}$

$= \dfrac{2m}{3x^5 - 4m^2x^3}$

Q.13 $\dfrac{5c-5d}{c^2-d^2}$

Sol. $= \dfrac{5(c-d)}{(c-d)(c+d)}$

$= \dfrac{5}{(c+d)}$

Plenary

Simplify

Q.10 $\dfrac{25a^3b^2}{14a^2b^4}$

Q.14 $\dfrac{x^2-y^2}{3y-3x}$

SOLUTION

Q.10 $\dfrac{25a^3b^2}{14a^2b^4}$

Sol. $= \dfrac{25a^{3-2}}{14b^{4-2}}$

$= \dfrac{25a}{14b^2}$

Q.14 $\dfrac{x^2-y^2}{3y-3x}$

Sol. $= \dfrac{(x-y)(x+y)}{3(y-x)}$

$= \dfrac{(x-y)(x+y)}{-3(x-y)}$

$= \dfrac{x+y}{-3}$

Homework

Ex 1.1 Q 11