



Pakistan School
Kingdom of Bahrain

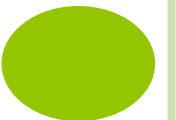
WELCOME CLASS 10TH (ARTS)

Algebraic Formulas and Applications

OBJECTIVES

Students will be able to:

Reduce the given algebraic expression to lowest terms



Reduce the given rational expression to lowest terms

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

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

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



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

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

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

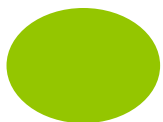
$$= \frac{2m}{x^3(3x^2 - 4m^2)}$$

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

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

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

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



PLENARY

Simplify

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

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



SOLUTION

$$\text{Q.10} \quad \frac{25a^3b^2}{14a^2b^4}$$

$$\begin{aligned}\text{Sol.} \quad &= \frac{25a^{3-2}}{14b^{4-2}} \\ &= \frac{25a}{14b^2}\end{aligned}$$

$$\text{Q.14} \quad \frac{x^2 - y^2}{3y - 3x}$$

$$\begin{aligned}\text{Sol.} \quad &= \frac{(x-y)(x+y)}{3(y-x)} \\ &= \frac{(x-y)(x+y)}{-3(x-y)} \\ &= \frac{x+y}{-3}\end{aligned}$$



HOMEWORK

Ex 1.1 Q 11

