



Division of Algebraic Expressions Ex 8.6 Q1

**Answer :**

$$\begin{aligned} & \frac{x^2 - 5x + 6}{x - 3} \\ &= \frac{x^2 - 3x - 2x + 6}{x - 3} \\ &= \frac{x(x - 3) - 2(x - 3)}{(x - 3)} \\ &= \frac{(x - 3)(x - 2)}{(x - 3)} \\ &= x - 2 \end{aligned}$$

Division of Algebraic Expressions Ex 8.6 Q2

**Answer :**

$$\begin{aligned} & \frac{ax^2 - ay^2}{ax + ay} \\ &= \frac{a(x^2 - y^2)}{a(x + y)} \\ &= \frac{a(x + y)(x - y)}{a(x + y)} \\ &= x - y \end{aligned}$$

**Answer :**

$$\begin{aligned} & \frac{x^4 - y^4}{x^2 - y^2} \\ &= \frac{(x^2)^2 - (y^2)^2}{(x^2 - y^2)} \\ &= \frac{(x^2 + y^2)(x^2 - y^2)}{(x^2 - y^2)} \\ &= x^2 + y^2 \end{aligned}$$

\*\*\*\*\* END \*\*\*\*\*