

Class Eight

Lecture - 4

Chap - 5.1

$$\begin{aligned} 4. \text{ क) } & \frac{a}{x-3} - \frac{a^2}{x^2-9} \\ &= \frac{a}{x-3} - \frac{a^2}{(x)^2-(3)^2} \\ &= \frac{a}{x-3} - \frac{a^2}{(x+3)(x-3)} \\ &= \frac{a(x+3)-a^2}{(x+3)(x-3)} \\ &= \frac{ax+3a-a^2}{x^2-9} \end{aligned}$$

$$\begin{aligned}
3. \text{ ক) হ) } \quad & \frac{1}{x-2} + \frac{1}{x+2} + \frac{4}{x^2-4} \\
&= \frac{x+2+x-2}{(x-2)(x+2)} - \frac{4}{x^2-4} \\
&= \frac{2x}{x^2-4} - \frac{4}{x^2-4} \\
&= \frac{2x+4}{x^2-4} \\
&= \frac{2(x+2)}{(x)^2-(2)^2} \\
&= \frac{2(x+2)}{(x+2)(x-2)} \\
&= \frac{2}{x-2}
\end{aligned}$$