

Incorrect. Because $x^2 - 1 = (x + 1)(x - 1)$, you should multiply both sides of the equation by $(x + 1)(x - 1)$ to clear the denominators:

$$\frac{5x(x^2 - 1)}{x^2 - 1} = \frac{4(x + 1)(x - 1)}{x - 1} - \frac{2(x + 1)(x - 1)}{x + 1}$$

Simplify to get a linear equation. Combine like terms and solve for x .