

$$(63) \quad \frac{\frac{x}{y^2} - \frac{y}{x^2}}{\frac{1}{y^2} - \frac{1}{x^2}} = \frac{\frac{x^3 - y^3}{x^2 y^2}}{\frac{x^2 - y^2}{x^2 y^2}} = \frac{x^3 - y^3}{x^2 - y^2} \cdot \frac{\cancel{x^2} \cancel{y^2}}{\cancel{x^2} \cancel{y^2}} = \frac{(x-y)(x^2 + xy + y^2)}{(x+y)(x-y)}$$

$$= \frac{x^2 + xy + y^2}{x+y}$$

$$(65) \quad \frac{\frac{2x}{1} + \frac{13x-3}{x-4}}{\frac{2x}{1} + \frac{x+3}{x-4}} = \frac{\frac{2x^2 - 8x + 13x - 3}{x-4}}{\frac{2x^2 - 8x + x + 3}{x-4}} = \frac{2x^2 + 5x - 3}{x-4} \cdot \frac{\cancel{x-4}}{2x^2 - 7x + 3}$$

$$= \frac{(2x-1)(x+3)}{(2x+1)(x+3)} = \frac{2x-1}{2x+1}$$

$$(67) \quad \frac{\frac{1}{(x+h)^2} - \frac{1}{x^2}}{\frac{h}{1}} = \frac{\frac{x^2 - (x^2 + 2xh + h^2)}{x^2(x+h)^2}}{h} = \frac{-h(2x+h)}{x^2(x+h)^2 h} = \frac{2x-h}{x^2(x+h)^2}$$

$$(69) \quad \frac{\frac{b}{a} - \frac{a}{b}}{\frac{1}{a} - \frac{1}{b}} = \frac{\frac{b^2 - a^2}{ab}}{\frac{a-b}{ab}} = \frac{b^2 - a^2}{ab} \cdot \frac{\cancel{ab}}{a-b} = \frac{(b-a)(b+a)}{a-b}$$

$$= \frac{-1(\cancel{a-b})(b+a)}{\cancel{a-b}} = -b-a$$