

$$\frac{2x}{2x+y} - \frac{4x^2}{4x^2+4xy+y^2}$$

$$\frac{2x}{4x^2-y^2} + \frac{1}{y-2x}$$

$$\frac{a}{b} = -\frac{a}{f}$$

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$$\frac{3}{35} + \frac{2}{49} = \frac{3 \cdot 49 + 2 \cdot 35}{35 \cdot 49}$$

$$\frac{3}{5 \cdot 7} + \frac{2}{7 \cdot 7} = \frac{3 \cdot 7 + 2 \cdot 5}{5 \cdot 7 \cdot 7}$$

$$4x^2+4xy+y^2=(2x+y)^2$$

$$4x^2-y^2=(2x-y)(2x+y)$$

$$\frac{1}{3} + \frac{1}{9} = \frac{1}{3}$$

$$\frac{2x}{2x+y} - \frac{4x^2}{(2x+y)^2}$$

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

$$\frac{2x(2x+y)}{(2x+y)^2} - \frac{4x^2}{(2x+y)^2}$$

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

$$\frac{4x^2+2xy - 4x^2}{(2x+y)^2}$$

$$\frac{2x}{(2x-y)(2x+y)} - \frac{1 \cdot (2x+y)}{(2x-y)(2x+y)}$$

$$\frac{2xy}{(2x+y)^2}$$

$$\frac{2x-2x-y}{(2x-y)(2x+y)}$$

$$\frac{2xy}{(2x+y)^2}$$

$$\frac{(2x-y)(2x+y)}{-y}$$

$$\frac{2xy}{(2x+y)^2} - \frac{(2x-y)(2x+y)}{-y}$$

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

$$\frac{2x(y-2x)}{(2x+y)}$$

$$\frac{2xy-4x^2}{(2x+y)}$$