Simplify the result and leave your answer in a factored form.

GCF $\frac{3x+6}{5x^2} \cdot \frac{x}{x^2-4}$

$\frac{3(x+2)}{5x^2} \cdot \frac{x}{x^2-4}$

$\frac{4x^2}{x^2-16} \cdot \frac{x^3-64}{2x}$

$\frac{2 \cdot 2 \cdot x \cdot x}{(x+4)(x-4)} \cdot \frac{(x-4)(x^2+4x+16)}{2x}$

$2x^2+x+16$

$A^3-B^3=(A-B)(A^2+AB+B^2)$

The result. Leave your answer in simplest form.

(35) $\frac{x+5}{2} + \frac{x+5}{2} = \frac{x+5}{2}$

(37) $\frac{x^2}{2x-3} - \frac{4}{2x-3} = \frac{x^2-4}{2x-3}$

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

(41) $\frac{3x+5}{2x-1} - \frac{x}{2x-1} = \frac{3x+5-x}{2x-1} = \frac{2x+5}{2x-1}$

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

$\frac{4}{x-2} - \frac{x}{(x-2)}$

$\frac{4-x}{}$

(46) $\frac{3(x+2)4}{(x+2)x-2} - \frac{2(x-2)}{x+2(x-2)}$

$\frac{4x+8}{x^2-4} - \frac{2x-4}{x^2-4} = \frac{6x+4}{x^2-4} = \frac{6x+4}{(x+2)(x-2)}$

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

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

(49) $\frac{(x-2)x-3}{(x-2)x+2} - \frac{x+4}{x-2}\frac{(x+2)}{(x+2)}$

$\frac{x^2+6}{x^2-4} - \frac{x^2+8}{x^2-4} = \frac{x^2+6-x^2+8}{x^2-4} = \frac{\cdot 2x^2+14}{x^2-4}$

(73) $\dfrac{1+\frac{1}{x}}{1-\frac{1}{2}} = 1+\frac{1}{x} \div 1-\frac{1}{x} = 1+\frac{1}{x} \cdot 1\frac{1}{x} = 1\frac{1}{2}$

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

$2 \cdot \frac{x+1}{x} \cdot 3+\frac{x+1}{x-1} = 6\frac{x+1}{x^2-1}$

K
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77 $\dfrac{\frac{x+4}{x-2}-\frac{x-3}{x+1}}{x+1} = \frac{x+4}{x-2}-\frac{x-3}{x+1} \div x+1$

$\frac{x+4}{x-2}-\frac{x-3}{x+1}$

(85) $\dfrac{(2x+3)\cdot 3-(3x-5)\cdot 2}{(3x-5)^2} =$

$\dfrac{(6x^2+9)-(6x-10)}{(9x-25)} = \dfrac{x-1}{9x-25}$

(87) $\dfrac{x\cdot 2x-(x^2+1)\cdot 1}{(x^2+1)} = \dfrac{x\cdot 2x-(x^2+1)}{(x^2+1)} \quad 2x^2-$