

## Adding and Subtracting Rational Expressions

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In problems 1-4, perform the indicated operation and simplify

1. $\frac{7x}{x+5} + \frac{3}{x+5}$	2. $\frac{3x-5}{x+1} - \frac{x-7}{x+1}$
3. $\frac{x}{x^2-10x+21} - \frac{3}{x^2-10x+21}$	4. $\frac{3x^2-7x+8}{2x^2+x-3} - \frac{2x^2-4x+6}{2x^2+x-3}$

In problems 5-11, add or subtract, as indicated, and simplify the result

5. $\frac{2x}{9x^2} + \frac{1}{3x}$	6. $\frac{x-1}{x-3} - \frac{x+4}{x-5}$
7. $\frac{3x}{x^2-8x+7} + \frac{4}{x^2-49}$	8. $\frac{x}{x-3} - \frac{4}{x^2-11x+24}$
9. $\frac{x}{x-5} + \frac{10}{x+5} - \frac{50}{x^2-25}$	10. $\frac{12}{x^2-9} + \frac{2}{x+3} - \frac{1}{2x-6}$
11. $\frac{3x}{x^2-2x-3} - \frac{4}{x^2-1}$	