Rational Functions 2 Name _____

Solve and check for extraneous solutions.

1. $\frac{8}{x+3} = \frac{5}{x-3}$

2. $1 + \frac{3}{x-3} = \frac{4}{x^2-9}$

3. $x + \frac{x}{x+2} = \frac{5x+8}{x+2}$

4. $\frac{6}{x-1} = \frac{4}{x-2} + \frac{2}{x+1}$

5. $\frac{x+1}{x-3} = 4 - \frac{12}{x^2-2x-3}$

6. $\frac{3}{x^2-4} = \frac{2}{x+2} + \frac{x}{x-2}$

7. $\frac{5x}{10-x} = \frac{x^2}{x-10}$

8. $\frac{1}{2x} + \frac{x}{3} = 7$

9. $\frac{x}{x-2} - \frac{4}{x^2-4} = 5$

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