PROBLEM SET 9-6
(Solving Rational Equations)

Solve each equation. Check each solution.

1. $\dfrac{15}{x} + \dfrac{9x-7}{x+2} = 9$

2. $\dfrac{2}{x+2} - \dfrac{1}{x} = \dfrac{-4}{x^2+2x}$

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

4. $x - \dfrac{x}{3} + \dfrac{x}{5} = 26$

5. $\dfrac{2}{x-3} - \dfrac{4}{x+3} = \dfrac{8}{x^2-9}$

6. $\dfrac{1}{8} + \dfrac{5x}{x+2} = \dfrac{5}{2}$

7. $\dfrac{1}{x-5} = \dfrac{x}{x^2-25}$

8. $\dfrac{x}{x+1} + \dfrac{x}{x-2} = 2$

9. $\dfrac{3}{x+5} + \dfrac{2}{5-x} = \dfrac{-4}{x^2-25}$

10. $\dfrac{5}{x+2} = \dfrac{-1}{x^2+7x+10} + \dfrac{3}{-x-5}$

11. $\dfrac{5}{x^2-7x+12} - \dfrac{2}{3-x} = \dfrac{5}{x-4}$

12. $\dfrac{10}{2x+8} - \dfrac{7x+8}{x^2-16} = \dfrac{-8}{2x-8}$

13. $\dfrac{7x+3}{x^2-8x+15} + \dfrac{3x}{x-5} = \dfrac{1}{3-x}$

14. $\dfrac{2}{x+3} - \dfrac{3}{4-x} = \dfrac{2x-2}{x^2-x-12}$