

**Radical and Rational Functions**  
**Review for Quiz**

Solve each inequality.

$$1) \frac{(x+7)(x-3)}{x-1} \geq 0$$

$$2) \frac{7}{x-2} < 1$$

$$3) \frac{x-2}{x+1} > 0$$

$$4) \frac{x+8}{x+8} < 3$$

$$5) \frac{(x-1)(3-x)}{(x-2)^2} \leq 0$$

Solve the radical equation, and check all proposed solutions.

6)  $\sqrt{7x + 44} = x$

11)  $\sqrt{2x + 14} - 6 \leq 4$

7)  $\sqrt{18x - 9} = x + 4$

12)  $6 + \sqrt{3x + 4} < 6$

8)  $\sqrt{3x + 4} = 3 + \sqrt{2x - 7}$

13)  $10 - \sqrt{2x + 7} \leq 4$

9)  $\sqrt{14x - 7} - 3 = x$

10)  $1 + \sqrt{5x - 2} > 4$