## 1.6 Other Types of Equations and Applications Honors Advanced Algebra with Trig

**Rational Equation:** an equation that has a rational expression for one or more terms.

\*When solving rational equations always \_\_\_\_\_\_ first. Then multiple by the LCD

1. Solve each equation. Be sure to check for extraneous solutions!

a. 
$$\frac{3x-1}{3} - \frac{2x}{x-1} = x$$

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

b. 
$$\frac{x}{x-2} = \frac{2}{x-2} + 2$$

d. 
$$\frac{-4x}{x-1} + \frac{4}{x+1} = \frac{-8}{x^2-1}$$