Solving Rational Equations

Step 1: Find the LCD and multiply each fraction by what is missing in the LCD.
Step 2: Cancel denominators.
Step 3: Solve for the variable.
Step 4: Check your answers.

1. Solve each rational equation.

a) $\dfrac{x-1}{x} + \dfrac{7}{3x} = \dfrac{9}{4x}$

b) $\dfrac{6}{t-1} + 2 = \dfrac{12}{t^2-1}$

c) $\dfrac{x}{x-4} = 6 + \dfrac{x}{x-4}$

d) $\dfrac{10}{m+3} - \dfrac{3}{5} = \dfrac{10m+1}{3m+9}$

e) $\dfrac{3}{y-2} - \dfrac{6}{y^2-2y} = 1$