Solving Rational Inequalities

-Combine everything into one fraction (common denominator).

-Find the zeros of the numerator and the denominator.

-Use these zeros as your cutpoints.

-Determine if the rational expression is positive or negative for each interval determined by the cutpoints.

-Carefully determine if each cutpoint is or is not a solution.

Example:
Solve the following inequality

$$\frac{x+1}{x-2} \leq 0$$

Example:
Solve the following inequality

$$\frac{2}{x+1}\,\frac{3}{x} > \frac{3}{x}$$

Example:
Solve the following inequality

$$\frac{1}{x} < 4$$