Rational Inequalities

1. Put everything on one side, zero on the other side
2. Write as a single quotient (fraction)
3. Find the critical points
4. Plot those points to identify intervals
5. Check "convenient" points within each interval to determine which interval(s) make the inequality true

Caution – when you multiply an inequality by a negative number, it reverses the order of the inequality.

1. $\dfrac{x-1}{x+3} > 0$

2. $\dfrac{x^2-25}{x+2} \leq 0$

3. $2 + \dfrac{x+3}{x-1} > 0$