

05 – Rational Inequalities

1. Solve each of the following inequalities, and write your answer in interval notation.

(a) $(2x - 5)(x + 3) < 0$

(b) $(2x - 5)(x + 3) \geq 0$

(c) $x^2 + 4x + 4 \leq 0$

(d) $-x(x - 2)^2(x - 5) \leq 0$

(e) $4x^3 + 64x^2 \geq 4x^4 - 80x$

(f) $\frac{5-x}{x+3} > 0$

(g) $\frac{5}{2x-7} > 1$