Calculus 12
8-1 Rules for Inequalities

1. Solve the inequality.

a) $3x + 7 > 0$

b) $17 - 2x \geq 13$

c) $x^2 - 7x + 6 > 0$

d) $12 - x - x^2 > 0$

e) $x^2 < 3x$

f) $(x+1)(2x+1)(x-6) > 0$

g) $x^3 + 3x^2 - 10x < 0$

h) $x^3 + 2x^2 - 9x - 18 > 0$

2. Solve the inequality.

a) $\dfrac{2x+1}{x^2+1} > 0$

b) $\dfrac{x+2}{x-3} > 0$

c) $\dfrac{x^2+x}{(x-1)^3} < 0$

d) $\dfrac{5x}{(x^2-1)^2} < 0$