1. Solve each quadratic inequality (express solution set using interval notation):

(a) $x^2 + x - 20 \geq 0$

(b) $x^2 - x - 12 < 0$

(c) $(x - 1)(x + 5)(x - 2) \leq 0$

2. Solve each rational inequality (express solution set using interval notation):

(a) $\dfrac{x - 3}{x + 1} \leq 0$

(b) $\dfrac{3x}{x - 2} > 1$

(c) $\dfrac{3}{x - 2} > \dfrac{2}{x + 2}$