1. Solve each inequality. Give the solution using interval notation.

a. $3x^2 - 13x - 10 \geq 0$

b. $\dfrac{2x+1}{x+2} \leq 1$

c. $\dfrac{(2x-1)(x+3)}{4-x} \leq 0$

d. $x^2 - 4x > 6$

2. What is the domain of the function $f(x) = \sqrt{\dfrac{3x^2 - 4x - 4}{x+3}}$? Write your answer using interval notation.