CALCULUS I
HOMEWORK NR. 1: FIRST PART

Spring Semester 2007, SAINT LOUIS UNIVERSITY
January 17th, 2007

Name:

Find all the real numbers satisfying the following inequalities. Write the solution using intervals and represent it in the real line.

(a) $x^4 - 16 \geq 0$.

(b) $x^{\frac{2}{3}} - x^{\frac{1}{3}} \leq 0$.

(c) $\dfrac{x+1}{x-1} \geq \dfrac{x}{x-1}$.

(d) $x^2 - 4 \geq 0$

(e) $2x + 5 < 3x - 4$

(f)
$$\frac{3x+2}{x-3} < 2.$$