Fake Quiz 2　　　　**Calc 1**　　　　**11/4/22**

1. Let $f(x) = x^3 - 9x + 6$.

   (a) Find the largest intervals on which f is increasing.

   (b) Find the largest intervals on which f is decreasing.

   (c) Find the largest intervals on which f is concave up.

   (d) Find the largest intervals on which f is concave down.

   (e) Find the coordinates of all local maximum points of f.

   (f) Find the coordinates of all local minimum points of f.

2. Let $f(x) = \sqrt{x^2 + 3x} - x$.

    (a) Find the largest intervals on which f is increasing.

    (b) Find the largest intervals on which f is decreasing.

    (c) Find the largest intervals on which f is concave up.

    (d) Find the largest intervals on which f is concave down.

    (e) Find the coordinates of all local maximum points of f.

    (f) Find the coordinates of all local minimum points of f.