Offline HW 3

This assignment is due on Monday, September 25. No extension will be given. You may submit it early but late work will not be accepted.

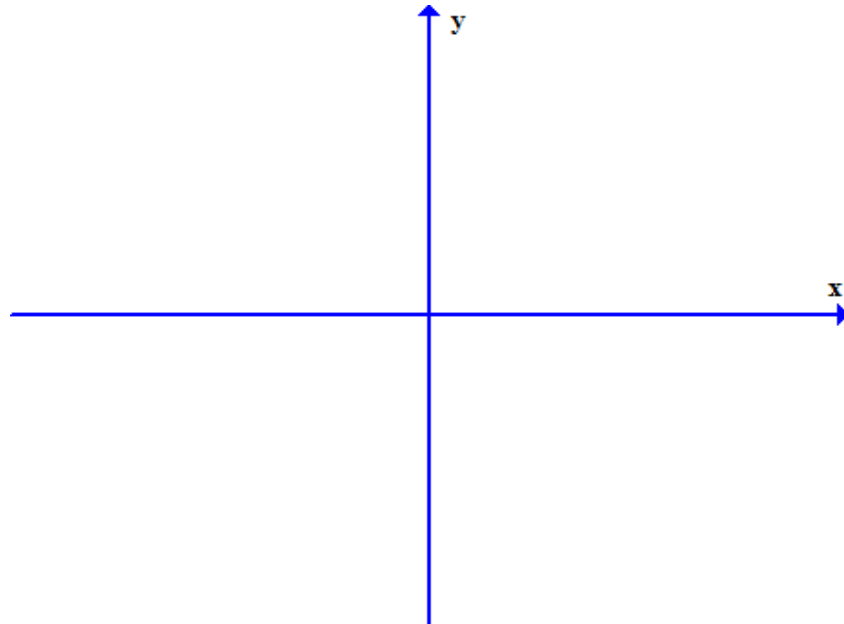Let $f(x) = -3(2x + 4)^2(x - 3)^3(x + 1)$.

    a) List the zeros of f and their multiplicities.

Zeros	Multiplicity

    b) Describe the end behavior of f.

    c) Sketch the graph of f.

    d) **Use the graph** obtained in part c) to solve given inequality (*note that you are asked to find values of x for which f(x) > 0*)

$$-3(2x + 4)^2(x - 3)^3(x + 1) > 0$$