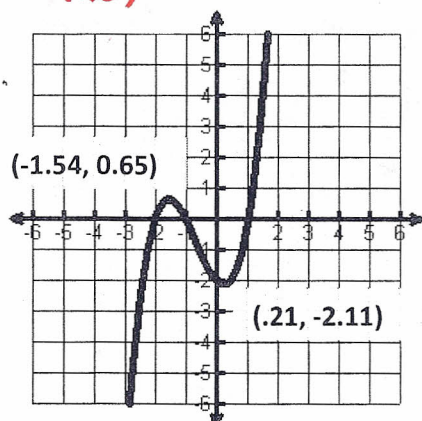


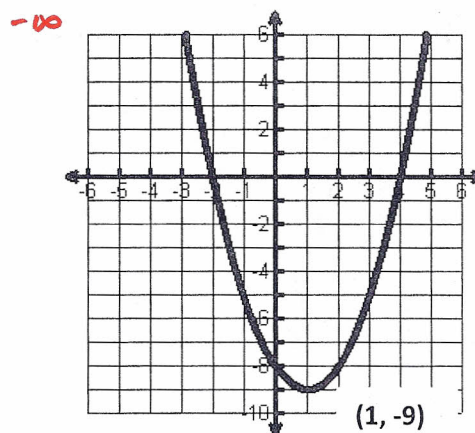
Name: Key

Date: _____

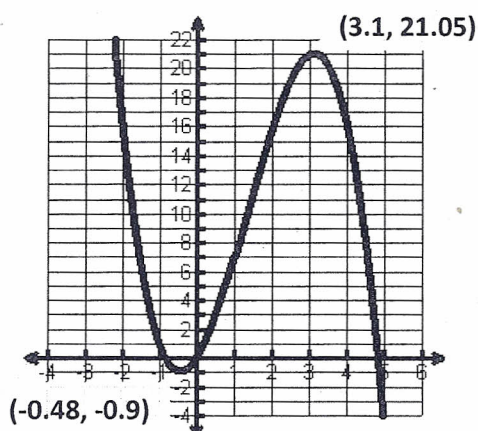
1. $f(x) = x^3 + 2x^2 - x - 2$

Rel. Max: (-1.54, 0.65) Rel. Min: (.21, -2.11)Abs. Max: NA Abs. Min: NAInc: (-\infty, -1.54)(.21, \infty) Dec: (-1.54, .21)Roots: (-2, 0)(-1, 0)
(1, 0) y-int: (0, -2)

2. $f(x) = x^2 - 2x - 8$

Rel. Max: NA Rel. Min: (1, -9)Abs. Max: NA Abs. Min: (1, -9)Inc: (1, \infty) Dec: (-\infty, 1)Domain: \mathbb{R} Range: $[-9, \infty)$ 

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

Rel. Max: (3.1, 21.05) Rel. Min: (-0.48, -0.9)Abs. Max: NA Abs. Min: NAInc: (-0.48, 3.1) Dec: (-\infty, -0.48)(3.1, \infty)Domain: \mathbb{R} Range: \mathbb{R} 

4. $f(x) = x^3 - 2x^2 - 4x + 8$

Rel. Max: (-0.7, 9.6) Rel. Min: (2, 0)Abs. Max: NA Abs. Min: NAInc: (-\infty, -0.7)(2, \infty) Dec: (-0.7, 2)Roots: (-2, 0)(2, 0) y-int: (0, 8)