## Lesson 3.2 – Polynomial Functions

- 1. Let  $f(x) = \frac{1}{4}x^4 2x^2$ .
  - (a) Find the x-intercepts of f.
  - (b) Find the critical points, the intervals of increase/decrease, and the local extrema of f.
  - (c) Find the intervals of concavity and the inflection points of f.
  - (d) Determine the end behavior of f.