Name: _____

- **Keep phones off and out sight.**

- **Do not talk during the quiz.**

- **No calculators, notes, books, or other aids.**

- **Show all work.**

1. Find the absolute maximum and absolute minimum of the function $f(x) = 4x - x^2$ on the interval $[0, 3]$.

2. Find all critical numbers of the function $f(x) = 3x^{2/3} - 4x$. (Only the x-coordinates are needed.)

(problem 3 on reverse)

3. Find all critical numbers of the function $f(x) = (x-2)^3(x-7)^2$. (Only the x-coordinates are needed.)

   Hint: remember to look for common factors before expanding anything!