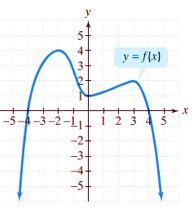
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Warm Up 1.3 SHOW YOUR WORK!!!**

Solve the following problems by hand, use a graphing calculator to check:

1.

1. The domain of f: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. The range of f: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. The x-intercept(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. The y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Interval(s) on which f is increasing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



1. Interval(s) on which f is decreasing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. The x value(s) at which f has a relative maximum or minimum: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. The relative maxima of f: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. The relative minimum of f: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. The value(s) of x for which f(x) = 0: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Simplify