

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

### Offline HW 1, rev. 2

This offline assignment is **due January, 18**. No extensions will be given.

**The overall look of your paper will count toward your grade.** Please graph the function on the grid provided below. **Submissions on other paper will not be graded.**

**You must graph the functions neatly and accurately BY HAND!** You must plot accurately **at least 2** points on each branch. ("Accurately" means that the graph passes through the points that satisfy the equation, not just have a general shape of the family of functions to which it belongs. For example, the graph of  $y = x^2$ , should be a parabola that passes through  $(0,0)$ ,  $(\pm 1,1)$ ,  $(\pm 2, 4)$  not any other parabola shape)

This must be **YOUR work**; you are not allowed to ask tutors, friends or family members for help. You CAN however consult with your classmates. If you choose to do so, each of you must submit a separate paper and the name of the person(s) with whom you collaborated must be written on this paper. The papers that are **suspiciously identical will receive 0 credit**.

Graph the following function

$$f(x) = \begin{cases} -2x - 8 & , \text{if } x \leq -5 \\ -3 & , \text{if } -5 < x \leq -1 \\ x^2 & , \text{if } x > -1 \end{cases}$$

