You may not use anything except a pencil and a scientific calculator for this quiz; clear off any other items from your desk. Read the directions on each problem, they are meant to help you :). Show your work for each step of the problem, no work equals no credit. The problems on this quiz vary in complexity and length, so use your time wisely. Work on the problems you know how to do to start and go back to the harder ones later. GOOD LUCK!!

Identify the domain and range of each relation. Represent the relation with a mapping diagram. Is the relation a function?

1. $(2 \mathrm{pts})\{(4.2,1.5),(5,2.2),(7,4.8),(4.2,0)\}$
2. $(2$ pts $)\{(-1,1),(-2,2),(4,-4),(7,-7)\}$

Is the relation a function? Use the vertical line test.
3. (2pts) Function: Yes No

4. (2pts) Function: Yes No


Graph each function rule. Complete the table of values.
5. $(7 \mathrm{pts}) y=x^{2}+1$

| x | $y=x^{2}+1$ | $(\mathrm{x}, \mathrm{y})$ |
| :---: | :--- | :--- |
| -2 |  |  |
| -1 |  |  |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |

$f(x)$


