## Key Features Homework II

1. Graph: $f(x)=-3|x|$

| $\mathbf{x}$ | $\mathbf{f ( x )}$ |
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2. Find $g(-3)$
3. Find x when $\mathrm{g}(\mathrm{x})=-6$

4. Draw a Sketch of Each Type of Graph:

5. Draw a graph that is increasing, then decreasing, has $x$ intercepts of -9 and 1 , and a y intercept of 4.



Absolute Value:
6. Draw a graph that is increasing with a changing slope and has a y intercept of -8.

7.


Domain:

Range:


Domain:
9.


Domain:

Range:
10. A sanitation company charges a $\$ 10$ weekly fee plus $\$ 4$ per bag of garbage. They only allow up to 5 bags of garbage for a household.
a. Write a rule in function notation for this situation.
b. What is a reasonable domain and range for this situation?
11. The American Red Maple tree grows approximately 4 feet per year until they reach a maximum height of about 20 ft .
a. Write a rule in function notation for this situation.
b. What is a reasonable domain and range for this situation?
12. A bakery has 320 ounces of bread dough. A machine will cut the dough into 5 -ounce sections and bake each section into a loaf every minute.
a. Write a rule in function notation for how much dough is left to bake.
b. What is a reasonable domain and range for this situation?

