## RETEST REVIEW: FUNCTIONS PART 1

Use the graph given to answer the following.

1. List the ordered pairs in this relation
$\qquad$ , $\qquad$
$\qquad$ , $\qquad$
$\qquad$ , $\qquad$
$\qquad$ , $\qquad$
$\qquad$ , $\qquad$
$\qquad$ , $\qquad$ )


2. Create a mapping.

3. Give the domain. $\qquad$
4. Give the range. $\qquad$
5. Is this relation a function? $\qquad$ Why or why not?

For each of the graphs below, state the domain and range.

| 6. $D=$ $\mathrm{R}=$ |  |
| :---: | :---: |
| 7. $\mathrm{D}=$ $\mathrm{R}=$ |  |

If $f(x)=2-3 x$ and $g(x)=x^{2}+6$, find the following.

| $8 . f(-3)=$ | $9 . g(-2)=$ | 10. $g(3)-f(2)=$ |
| :--- | :--- | :--- |
|  |  |  |

11. Which of the following is a function?
A.


D.

12. Which of the following relations is not a function?
A. $\{(3,7),(5,-3),(3,7)\}$
B. $\{(4,4),(6,6),(5,5)\}$
C. $\{(3,7),(5,4),(9,-1)\}$
D. $\{(7,3),(8,-6),(6,5)\}$
13. Which of the following relations is a function?
I. $\{(3,4),(4,5),(3,6)\}$
II. $\{(3,4),(4,4),(5,4)\}$
III. $\{(3,6),(3,5),(3,4)\}$
IV. $\{(3,6),(4,5),(5,3)\}$
A. I and II only
C. I, II, and III only
B. II and IV only
D. II and III only

Answers in random order: $0<x \leq 6,19,3<y \leq 7,\{-5,-2,0,3,7\}$, all $x$-values are different, $x \geq-3, y \leq 5,\{-4,0,1,6,2\}$, 11, No, B, C, $10,(7,2),(3,-4),(0,6),(-2,1),(-5,0),(-5,-4), \mathrm{A}$


