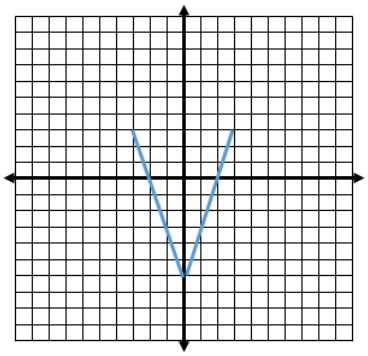
Math 2 **Name:** _____

Unit 2A Quiz 1 Review

Use the following function Victor, $V(x)$ to answer the questions 1-3

1. List the characteristic points of $V(x)$.



2. What are the domain and range of $V(x)$?

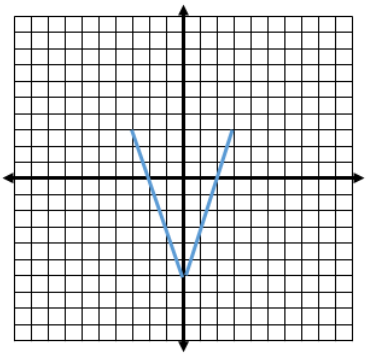
3. State the effect on Victor for $V(x+3)-2$. Then graph it on the coordinate grid with $V(x)$.

For each function, describe in words all of the transformations to the $P(x)$ in the order that they occur.

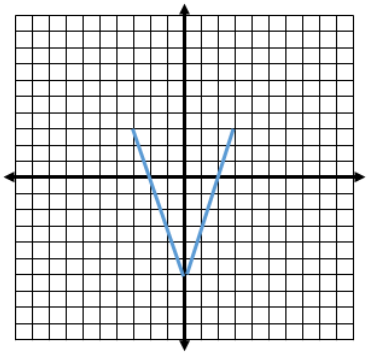
	Function	Transformations
4.	$y = P(x-3)+5$	
5.	$y = \frac{1}{4}P(x+1)$	
6.	$y = 7P(-x)-2$	
7.	$y = -4P(x-2)+11$	

Graph each transformation on the coordinate grid with the parent function Maximus, $M(x)$.

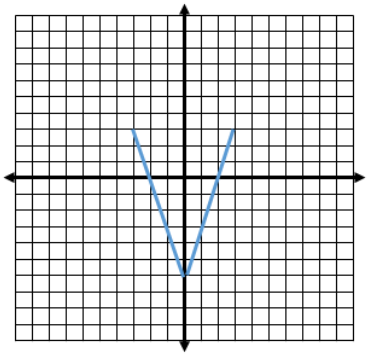
8. $y = V(x+3)+5$



9. $y = -V(x)-7$



10. $y = \frac{1}{3}M(x+3)$



11.	**Circle the correct term**: The domain is affected when a transformation is moved **left and right** or **up and down**
12.	Write the equation that would translate $F(x)$ 5 units up.
13.	Write the equation that would translate $F(x)$ 8 units down and 6 units right.
14.	Write the equation that would reflect $F(x)$ in the x-axis and vertically shrink by $1/6$
15.	Write the equation that would reflect $F(x)$ in the y-axis and translate it 5 units down.
16.	Write the equation that would vertically shrink $F(x)$ by $1/5$ and translate down by 2
17.	Write the equation that would reflect $F(x)$ in the x-axis, vertically shrink it by $1/3$ and translate it 2 units right and 4 units down.
18.	If the domain and range of $P(x)$ are $D = 4 \leq x \leq 9$ and $R = -5 \leq y \leq -1$ what would be the domain and range of the transformed function $y = -P(x)$?
19.	If the domain and range of $P(x)$ are $D = 4 \leq x \leq 9$ and $R = -5 \leq y \leq -1$ what would be the domain and range of the transformed function $y = 4P(x)$?
20.	If the domain and range of $P(x)$ are $D = 4 \leq x \leq 9$ and $R = -5 \leq y \leq -1$ what would be the domain and range of the transformed function $y = 2P(x + 3) - 4$?