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## Study Guide for Unit 1 Post Test

Directions: Answer each of the questions below in preparation for your Unit 1 Post test on our 6 Learning Targets.

Target: Graph ordered pairs and identify the location of ordered pairs on the coordinate plane.


A $\qquad$
B $\qquad$
C $\qquad$
$\qquad$
E $\qquad$
F $\qquad$
G $\qquad$


A $(1,4)$
B (-2,3)
C $(-3,-5)$
D (4,-2)
E (0,1)
F (-2,0)
G $(5,0)$

Target: Complete input/output tables and graph coordinates for a given equation

| x | $\mathrm{y}=\mathrm{x}+\mathbf{6}$ | y | $(\mathrm{x}, \mathrm{y})$ |
| :--- | :--- | :--- | :--- |
|  |  |  | $()$, |
|  |  |  | $()$, |
|  |  |  | $()$, |
|  |  |  | $()$, |
|  |  |  | $()$, |
|  |  |  | $()$, |


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Target: identify independent and dependent variables.

Carlos walked from his house to school. He was at school for several hours. Then on his way home, Carlos walked to the library. He was at the library for an hour. Then he walked back to his house. The graph shows the relationship.

a. In the graph, what is the independent and dependent quantity?

Independent: $\qquad$

Dependent: $\qquad$

How long was Carlos at school?
$\qquad$

Target: Analyze graphs to look for common characteristics.


Which scenario matches the graph:
A. Mario is tracking how much time he spends playing football after school.
B. Brittany is tracking how much money is left on a gift card from her grandma
C. Kala is tracking how much money she makes at work
D. DaMari is tracking the time he spends studying vs the grade he earns

Write each equation in function form:
Give the family function for each:
a. $y=2 x+1$
b. $y=-2 x^{2}+x-2$
c. $y=-5-10$
d. $y=|4 x+1|$
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Target: Recognize characteristics of function families; determine function types given certain characteristics.

Match the characteristic with the family function:
a. U shaped smooth curve $\qquad$
b. J shaped smooth curve $\qquad$
c. V shaped $\qquad$
d. A line $\qquad$

Match the characteristic with the family function
a. Has a maximum or minimum (2 answers) $\qquad$
b. Made up of 2 straight lines $\qquad$
c. Can be constant $\qquad$
d. Can be discrete $\qquad$

Tell whether each is increasing, decreasing or constant: Tell whether each has an absolute max, min, or neither
a. $y=2 x+1$
b. $y=-2 x 2+x-2$
c. $y=-5 x-10$
$\qquad$
$\qquad$
$\qquad$
d. $y=|4 x+1|$
$\qquad$
$\qquad$

Give the function family and 2 other characteristics of this graph:

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Target: Given a graph or equation, determine if it is a function using the vertical line test




Sketch the graph of a function with the following characteristics:

- Linear
- Increasing
- Continuous
- Function

- Absolute Value
- Increasing
- Discrete
- Function


