

ALGEBRA I Study Guide

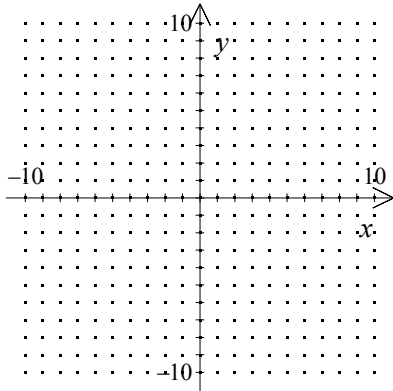
Unit 5

NAME _____

DATE _____ PERIOD _____

1. Graph the line that contains the pairs of numbers in the table below.

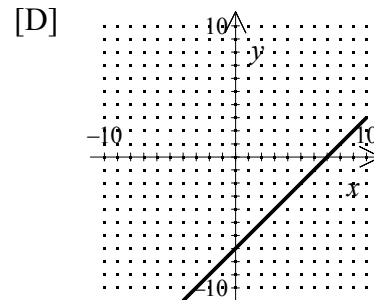
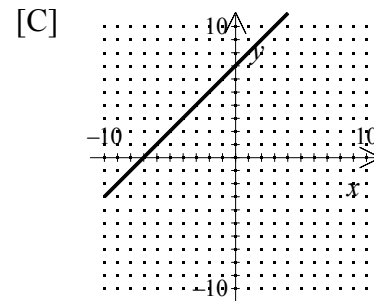
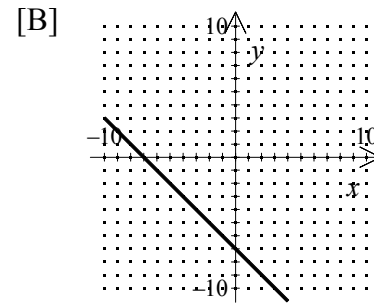
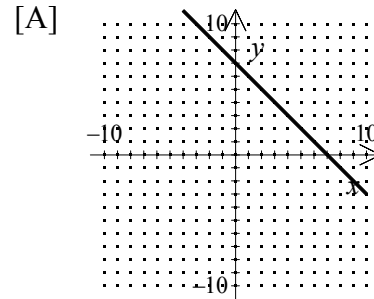
x	0	3	6	9
y	1	4	7	10



[1] _____

2. Which of the following graphs is the graph of the pairs of numbers in the table?

x	0	3	6	9
y	-7	-4	-1	2



[2] _____

3. Identify each variable as independent or dependent.
postage required, weight of a package

[3] _____

4. Identify each variable as independent or dependent.
cost, number of movies rented

[4] _____

5. Determine if the relation is a function.

x	1	2	3	4
y	3	6	9	12

[5] _____

6. Determine which relation is a function.

[A]

x	6	4	6	-1
y	0	3	2	-2

[B]

x	-2	0	1	2
y	0	-2	-3	-4

[C]

x	0	0	0	0
y	0	1	2	3

[D]

x	3	3	2	0
y	1	4	5	-3

[6] _____

7. What is the range of the function $y = -2x^2 + x$ when the domain is $\{1, 3, 5\}$?

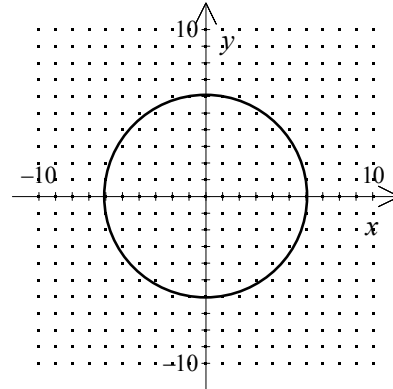
- [A] $\{3, 9, 5\}$ [B] $\{-3, -9, -5\}$
 [C] $\{5, 21, 55\}$ [D] $\{-1, -15, -45\}$
 [E] $\{1, 15, 45\}$

[7] _____

8. Evaluate the function rule $y = -4x^2 - 2x + 1$ for $x = -2$.

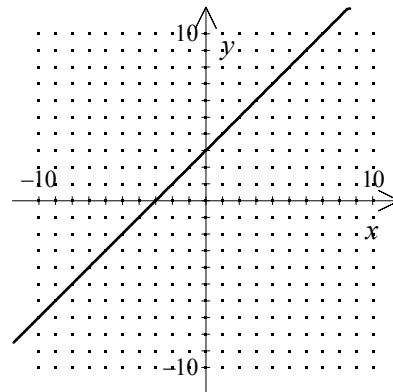
[8] _____

9. Does the graph represent a function? Why or why not?



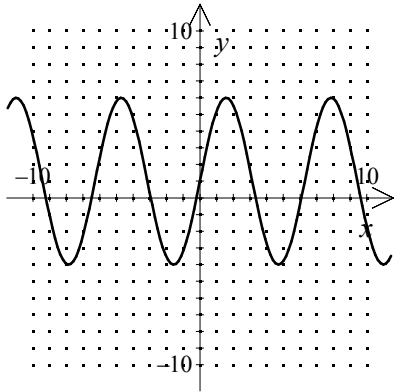
[9] _____

10. Does the graph represent a function? Why or why not?



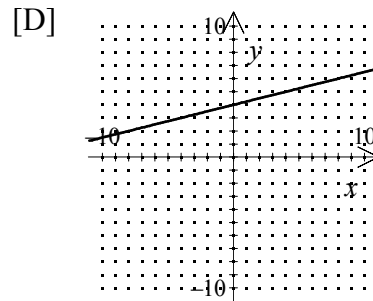
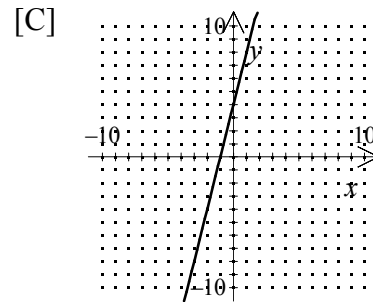
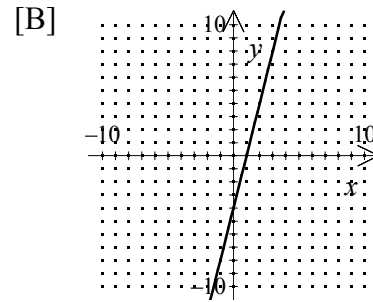
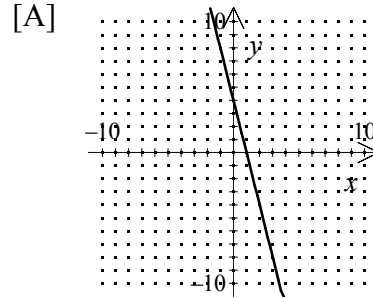
[10] _____

11. Does the graph represent a function? Why or why not?



[11] _____

12. Which of the following represents the graph of $g(x) = 4x + 4$?



[12] _____

13. Complete the table for the given values of x .

x	$2x + 5$
0	
1	
2	
3	

[13] _____

14. Which function is modeled by the table?

x	-5	0	1	3
y	-9	1	3	7

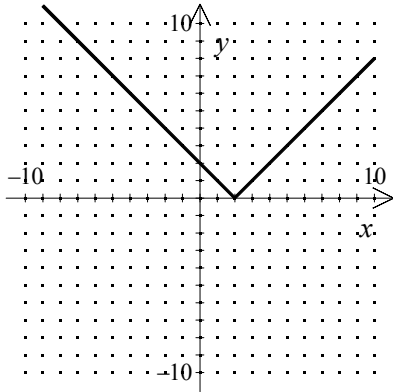
[A] $f(x) = -x + 4$ [B] $f(x) = 2x + 1$

[C] $f(x) = x + 3$ [D] $f(x) = 3x$

[E] $f(x) = x - 3$

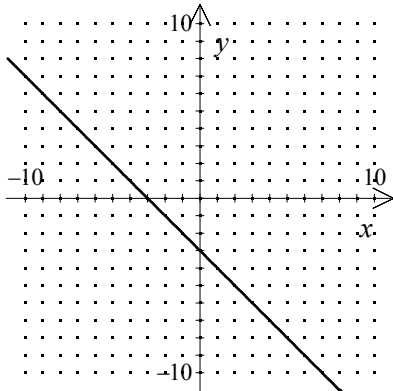
[14] _____

15. To what family of functions does the graph belong?



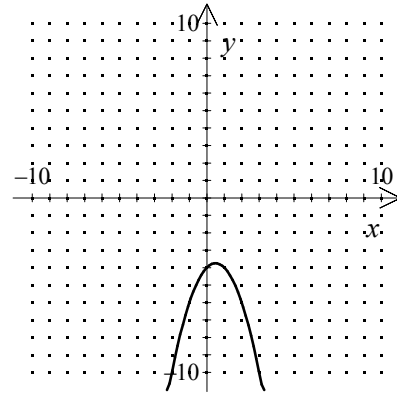
[15] _____

16. To what family of functions does the graph belong?



[16] _____

17. To what family of functions does the graph belong?



[17] _____