Algebra 1 ECA Remediation **Name** _____

Homework 7.1

What is the domain and range of the relation shown in the table provided? Determine if the relation is a function.

1.

x	y
-2	-6
0	-3
2	1
4	5

Domain:

Range:

Function?

2.

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

Domain:

Range:

Function?

3.

x	y
-4	2
2	5
3	8
2	11

Domain:

Range:

Function?

Determine which set of ordered pairs represent a function.

4. {(2, 4), (3, 5), (4, 4), (7, 5)}

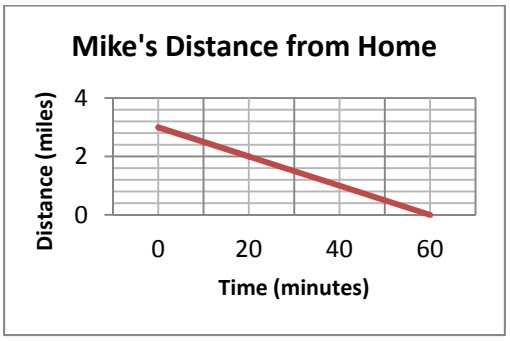
5. {(2, 7), (2, 5), (4, 3), (9, 1)}

6. {(-3, 14), (3, 7), (-3, 9), (17, 15)}

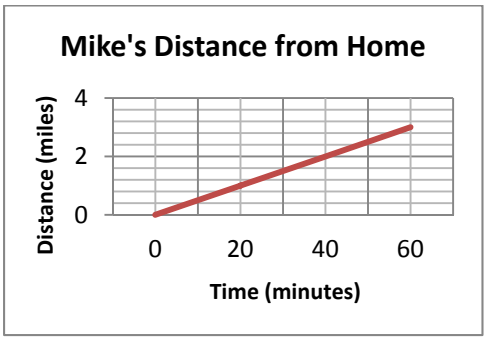
7. {(12, 6), (13, 5), (3, 4), (8, 6)}

8. Mike ran from his home to the grocery store at a constant speed. He immediately turned around and ran back home, but at a slower constant speed. Mike ran along a straight path to and from the grocery store. Which graph best represents Mike's distance from his home over time?

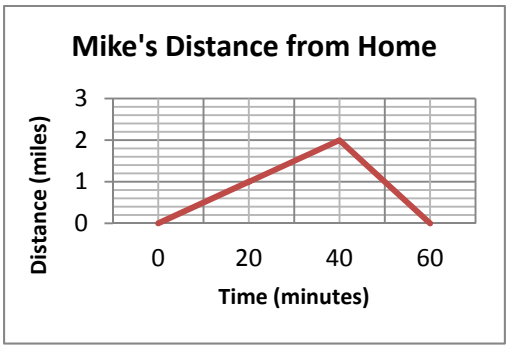
A.



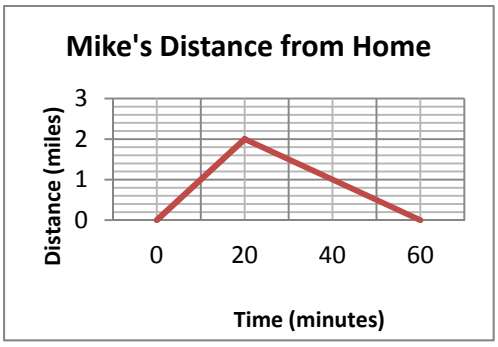
B.



C.

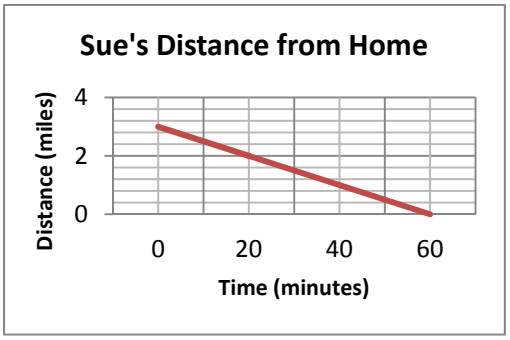


D.

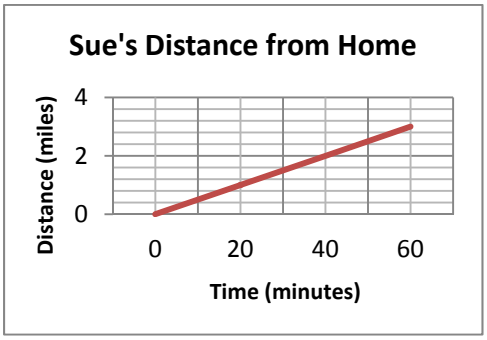


9. Sue rode her bike from home to school at a constant speed. Sue rode her bike along a straight path to school. Which graph best represents Sue's distance from her home over time?

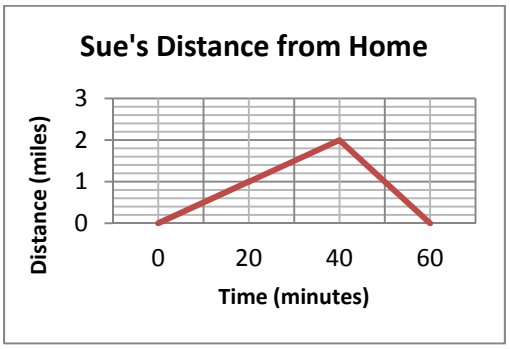
A.



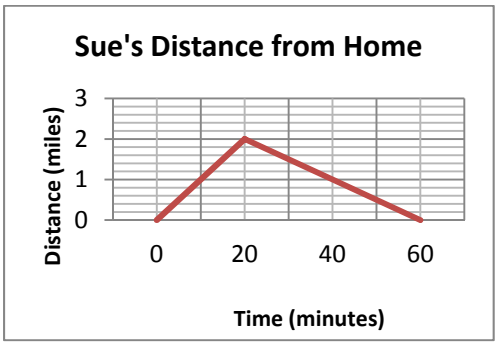
B.



C.



D.



In each of the following problems, a linear equation has been solved incorrectly. You need to determine where the mistake was made and then solve the equation for the correct answer.

10. $2x - 1 = 3(x - 17) - 2x$

$2x - 1 = 3x - 51 - 2x$

$2x - 1 = 5x - 51$

$-1 = 3x - 51$

$50 = 3x$

$50/3 = x$

11. $5 + 3x = 4(x - 25) - 2x$

$5 + 3x = 4x - 25 - 2x$

$5 + 3x = 2x - 25$

$5 + x = -25$

$x = -30$

Answers:

1. Domain: {-2, 0, 2, 4}
   Range: {-6, -3, 1, 5}
   Function? yes

2. Domain: {1, 3, 4}
   Range: {-2, -1, 1, 2}
   Function? no

3. Domain: {-4, 2, 3}
   Range: {2, 5, 8, 11}
   Function? No

4. Function

5. Not a Function

6. Not a Function

7. Function

8. D.

9. B

10. Combined like terms incorrectly, -50

11. Distributed incorrectly, -105