Algebra 1 ECA Remediation

Name Answer Key

Homework 22.2

Simplify each expression.

1) $(-4x + 3x^3 - 5x^4) + (8x + 3x^2 - x^3)$

$-5x^4 + 3x^3 \quad -4x$

$\quad -x^3 + 3x^2 + 8x$

$-5x^4 + 2x^3 + 3x^2 + 4x$

2) $(-6 + 8x^2 + 5x^3) + (-3x^2 + 3x^4 + 4x^3)$

$5x^3 + 8x^2 - 6$

$3x^4 + 4x^3 - 3x^2$

$3x^4 + 9x^3 + 5x^2 - 6$

3) $(-4 + 7n - 2n^4) - (-6 + 5n - 7n^4)$

$-2n^4 + 7n - 4 + 6 - 5n + 7n^4$

$-2n^4 + 7n - 4$

$+7n^4 - 5n + 6$

$5n^4 + 2n + 2$

4) $(-4 - 5n^3 + 4n) + (-8n + 5n^3 - 6)$

$-5n^3 + 4n - 4$

$+5n^3 - 8n - 6$

$-4n - 10$

5) $(1 - 8a^2 - 8a) - (4 - 6a^2 - 4a)$

$-8a^2 - 8a + 1 - 4 + 6a^2 + 4a$

$-8a^2 - 8a + 1$

$+6a^2 + 4a - 4$

$-2a^2 - 4a - 3$

6) $(p^4 - 4p^3 - 2p^2) - (-8p^3 - 5p^2 + 3p^4)$

$p^4 - 4p^3 - 2p^2 + 8p^3 + 5p^2 - 3p^4$

$p^4 - 4p^3 - 2p^2$

$-3p^4 + 8p^3 + 5p^2$

$-2p^4 + 4p^3 + 3p^2$

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

7.

x	y
2	-2
-2	-2
4	4
7	8

Domain: {-2, 2, 4, 7}
Range: {-2, 4, 8}
function

8.

X	y
1	-3
2	-2
6	-1
9	-2

Domain: {1, 2, 6, 9}
Range: {-3, -2, -1}
function

Determine which set of ordered pairs represent a function.

9. {(9, 6), (5, 9), (4, 5), (3, 1)}

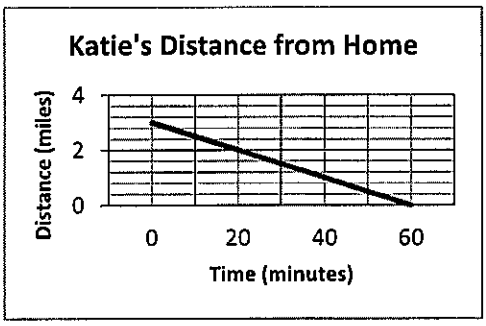
function

10. {(8, 3), (7, 2), (3, 7), (8, 2)}

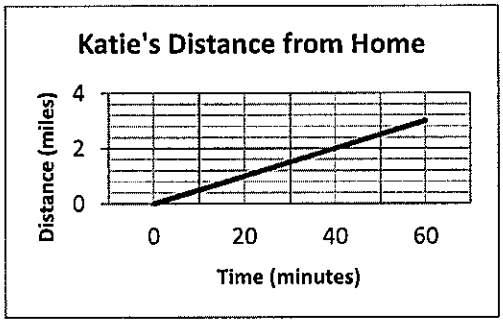
Not a function

11. Katie rode her bike from her home to the park at a constant speed. She immediately turned around and rode back home, but at a faster constant speed. Katie ran along a straight path to and from the park. Which graph best represents Katie's distance from her home over time?

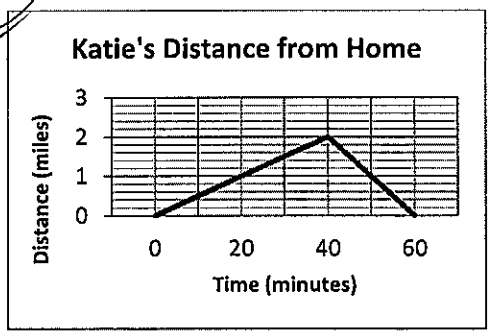
A.



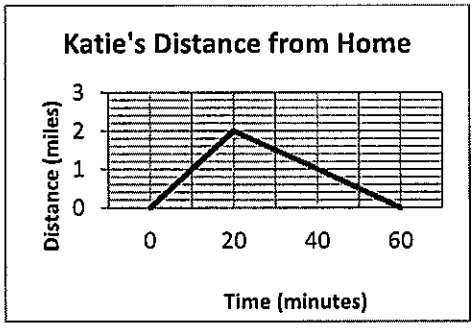
B.



C.



D.



Answers to Homework 22.2

1) $-5x^4 + 2x^3 + 3x^2 + 4x$ 2) $3x^4 + 9x^3 + 5x^2 - 6$ 3) $5n^4 + 2n + 2$

4) $-4n - 10$ 5) $-2a^2 - 4a - 3$ 6) $-2p^4 + 4p^3 + 3p^2$

7. Domain: {-2, 2, 4, 7}

   Range: {-2, 4, 8}

   Function

8. Domain: {1, 2, 6, 9}

   Range: {-3, -2, -1}

   Function

9. Function

10. Not a Function

11. C.