

Homework 22.3**Simplify each expression.**

1) $(r^3 - 5r^2 + 6) - (2 + 5r^2 + 7r^3)$

2) $(-3b^3 + b - 6) + (-b^3 - 5 + 5b)$

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

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

5) $(-3a^4 + 5 + 4a^2) - (-8 - 8a^2 - 5a^4)$

6) $(6m^2 + 1 + 8m^3) + (m^2 + 3 + 6m)$

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

7.

x	y
7	-1
-3	-5
-4	6
5	9

8.

X	y
3	-2
5	-9
3	6
8	4

Domain:

Range:

Domain:

Range:

Determine which set of ordered pairs represent a function.

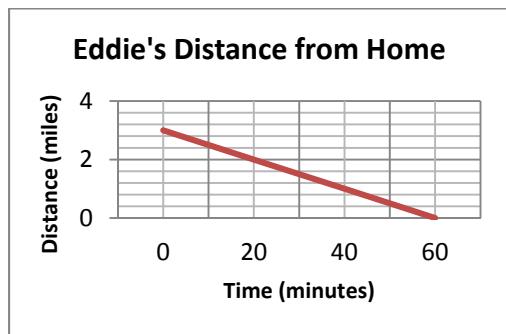
9. $\{(3, 5), (4, 5), (2, 8), (4, 1)\}$

10. $\{(5, 7), (-2, 3), (4, 6), (9, 11)\}$

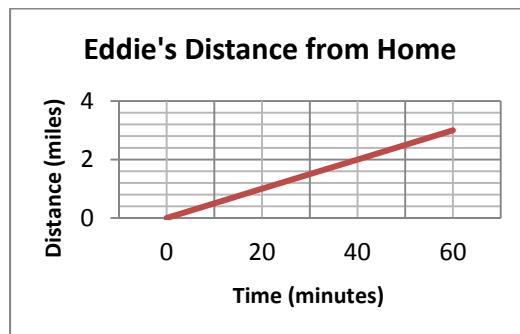
11. Eddie rode his skateboard from his home to school at a constant speed.

Which graph best represents Eddie's distance from his home over time?

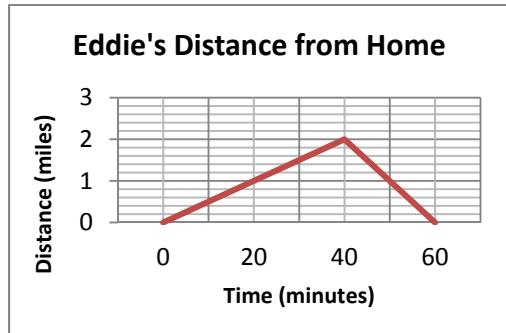
A.



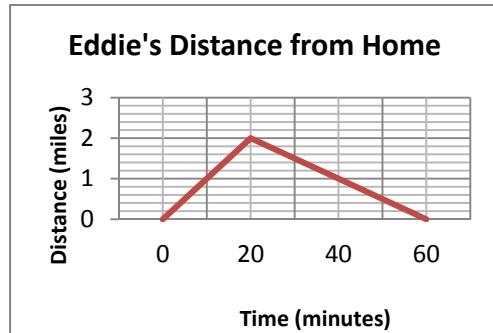
B.



C.



D.



Answers to Homework 22.3

1) $-6r^3 - 10r^2 + 4$

5) $2a^4 + 12a^2 + 13$

7. Domain: $\{-4, -3, 5, 7\}$ Range: $\{-5, -1, 6, 9\}$

Function

2) $-4b^3 + 6b - 11$

6) $8m^3 + 7m^2 + 6m + 4$

8. Domain: $\{3, 5, 8\}$ Range: $\{-9, -2, 4, 6\}$

Not a Function

3) $-6n^4 - n^3 - 3n^2 - 2n$

4) $-6x^3 - 7x - 12$

9. Not a Function

11. B.

10. Function

