

Quiz 22.3

Simplify each expression.

1) $(-4k^3 + 8k + 6k^2) - (-7k + 4k^2 + 3k^3)$

A) $-7k^3 + 2k^2 + 15k$

B) $-7k^3 + 2k^2 + 10k$

C) $-k^3 + 2k^2 + 10k$

D) $-k^3 + 2k^2 + 7k$

2) $(-7a - 5a^4 - 4a^2) - (-2a + 3 + 8a^2)$

A) $-2a^4 - 18a^2 - 5a - 3$

B) $-5a^4 - 12a^2 - 5a - 3$

C) $-2a^4 - 18a^2 - 3$

D) $-5a^4 - 18a^2 - 5a - 3$

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

A) $6p^4 - 2p^2 - 9p$

B) $6p^4 - 2p^2 - 14p$

C) $-p^4 - 2p^2 - 9p$

D) $-p^4 - 2p^2 - 4p$

4) $(-2x^4 - 7x^3 - 1) + (8x^3 + 3x^4 + 3)$

A) $4x^4 + 4x^3 + 2$

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

C) $x^4 + x^3 + 2$

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

What is the domain and range of the relation shown in the table provided?

5.

| X | y |
|---|---|
| 4 | 3 |
| 6 | 5 |
| 2 | 7 |
| 8 | 9 |

- A. Domain: $\{-4, -2, 4, 5\}$ Range: $\{-4, -2, 4, 5\}$
- B. Domain: $\{4, 6, 2, 8\}$ Range: $\{3, 5, 7, 9\}$
- C. Domain: $\{-4, -2, 4, 5\}$ Range: $\{-7, -4, 2\}$
- D. Domain: $\{3, 5, 7, 9\}$ Range: $\{4, 6, 2, 8\}$

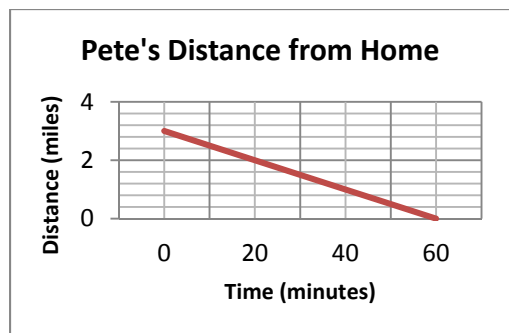
Determine which set of ordered pairs represent a function.

6. $\{(2, 5), (2, 6), (3, 7), (6, 5)\}$

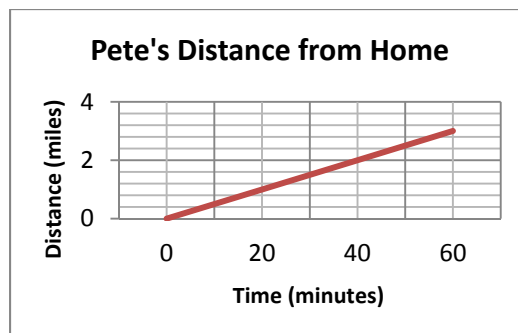
- A. Function
- B. Not a Function

7. Pete rode his bike from home to school at a constant speed. Pete then turned around and returned home at a constant but faster pace. Assume that Pete travels along a straight line. Which graph best represents Pete's distance from his home over time?

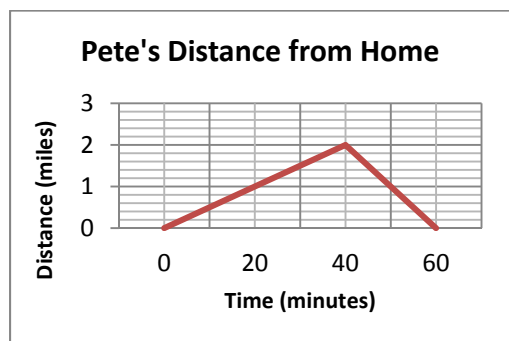
A.



B.



C.



D.

