

6-84.

a. $(5, 3)$

b. $(2, -6)$

6-85.

a. You end up with $10 = 10$. Some students may conclude that it is all real numbers or infinite solutions.

b. The two lines are the same.

c. Since the equations represent the same line when graphed, any coordinate pair (x, y) will solve both equations.

6-86.

a. Let p represent the number of pizza slices and b represent the number of burritos sold. Then $2.50p + 3b = 358$ and $p = 2b - 20$.

b. 82 pizza slices were sold.

6-87.

a. 1.05

b. $20(1.05)^5 = \$25.52$

c. $t(n) = 20(1.05)^n$; 20 represents the current (initial) cost and 1.05 represents the percent increase.

6-88.

a. $\frac{90mi}{1.5h} = \frac{330mi}{x}$; $x = 5.5$ hours

b. $90 = 1.5r$, $r = 60$ mph, $330 = 60t$, $t = 5.5$ hours

c. yes

6-89.

a. $\frac{8}{25}$

b. xy^6

c. 1.2×10^9

d. 8×10^3

