Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Chapter 4 & 5 Final Review

Multiple Choice
Identify the choice that best completes the statement or answers the question.

Solve the system of linear equations by elimination. Check your solution.

____ 1. $3x - 18 = 2y$

$5x - 6y = 14$

a. $(-10, 6)$
b. $(10, 6)$
c. $(10, -6)$
d. $(-10, -6)$

____ 2. $2x + 2y = 16$

$-x + 2y = 1$

a. $(15, -8)$
b. $(15, 8)$
c. $(5, 3)$
d. $(-5, 3)$

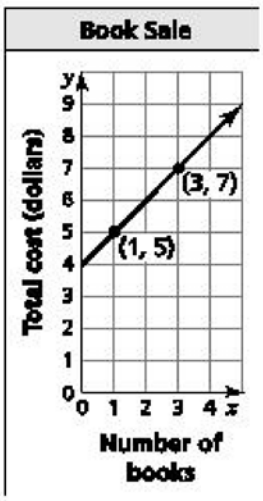
____ 3. Which ordered pair is a solution to the system of linear equations below?

$y = \frac{1}{4}x + 2$

$y = x - 1$

a. (–4, 1)
b. (3, 4)
c. (4, 3)
d. (6, 4)

____ 4. The town library is having a used book sale. The graph below can be used to find the total cost y to buy x books. The total cost includes the admission fee. What is the equation of the line shown?



a. $y = x + 4$
b. $y = x - 4$
c. $y = -x + 4$
d. $y = -x - 4$

Solve the system of linear equations using a graph.

____ 5. $y = -x - 4$

$y = \frac{1}{2}x + 5$

a. $(4, -8)$

b. $(-6, 2)$

c. $(7, 8\frac{1}{2})$

d. $(4, 7)$

Solve the system of linear equations by substitution. Check your solution.

____ 6. $3x = y - 8$

$x - 8 = y$

a. $(-16, -8)$

b. $(0, -8)$

c. $(-8, -16)$

d. $(-8, 0)$

____ 7. $y - x = 0$

$7x - 9y = 8$

a. $(4, 4)$

b. $(4, -4)$

c. $(-4, 4)$

d. $(-4, -4)$

Numeric Response

1. At a sporting event, the price for 3 cheeseburgers and 2 cups of lemonade is $14 and the price for 2 cheeseburgers and 4 cups of lemonade is $12. How much does it cost for 1 cheeseburger and 2 cups of lemonade?

2. One week you spent $24 on 6 subway tickets and 4 express bus tickets. The next week you spent $27 on 3 subway tickets and 7 express bus tickets. How much will it cost you to buy 5 subway tickets and 2 express bus tickets this week?

3. The table shows the purchases of two customers at a concession stand at the basketball game. You want to buy 10 drinks and 9 burgers for you and your friends. How much do you expect to pay?

	Hamburgers	**Drinks**	**Total Cost**
Customer 1	6	2	$34.50
Customer 2	3	8	$33.00

Short Answer

Solve the system of linear equations by elimination. Check your solution.

1. $x + 6y = 12$

   $x + 3y = 3$

2. $2x - y = -2$

   $x - 2y = -16$

3. Consider the following system of linear equations.

   $y = x + 1$

   $y = 2x$

   How can you check whether the point (1, 2) is a solution of the system? Explain.

Chapter 4 & 5 Final Review
Answer Section

MULTIPLE CHOICE

1. B
2. C
3. C
4. A
5. B
6. C
7. D

NUMERIC RESPONSE

1. $6
2. $16
3. 67.50

SHORT ANSWER

1. (–6, 3)
2. (4, 10)
3. *Sample answer:* A solution of a system of linear equations is an ordered pair that makes each equation true. So, check whether the point (1, 2) makes both equations true.