1.11 HW – Solving Systems by Elimination
Name _____ Date_____ Period _____

Solve each system by elimination.

1.
$5x - 2y = 4$
$3x + y = 9$

2.
$3x - 5y = 7$
$5x - 2y = -1$, what is xy?

3.
$4x + 6y = 0$
$6x + 8y = 2$

4.
$4x + 3y = 9$
$3x + 4y = 12$

5.
$3x - 2y = -1$
$3x - 4y = 9$

6. If $x + y = A$ and $x - y = B$, then x = ?

7. Three hundred fifty-eight tickets were sold to the school basketball game on Friday. Student tickets were $1.50 and non-student tickets were $3.25. The school made $752.25. How many student and non-student tickets were sold?

Set up and solve the system by elimination.

8. Carl bought 19 apples of 2 different varieties to make a pie. The total cost of the apples was $5.10. Granny Smith apples cost $0.25 each and Gala apples cost $0.30 each. How many of each type of apple did Carl buy?

9. Karrie and Amy were shoulder partners. They both worked the same problem, but got two different answers. Who is incorrect and explain the error they made?

Karrie:

$x + y = -3$ ⟶ $x + y = -3$

$3x + y = 3$ ⟶ $-(3x + y = 3)$

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$-2x = 0$

$x = 0$

When she solved for x, Karrie got $x = 0$

Amy:

$x + y = -3$ ⟶ $x + y = -3$

$3x + y = 3$ ⟶ $-(3x + y = 3)$

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$-2x = -6$

$x = 3$

When she solved for x, Amy got x= 3

Set up the system, state the best method to use and use that method to solve.

10. The perimeter of a rectangular volleyball court is 180 feet. The court's width, w, is half its length, l. Determine the dimensions, in feet, of the volleyball court.

11. At Candy's Sweet Shop, Sarah made c pounds of chocolate-covered raisins, which sell for $1.50 a pound, and y pounds of yogurt-covered raisins, which sell for $1.20 a pound. Sarah wants to make 40 pounds of a mixture of the two kinds of raisins that sells for $1.35 a pound. How many pounds of each kind of raisin is needed to produce the mixture?