**Chapter 11 & 12 Review Packet**

**Name:**  **Date:**

**Directions: Solve the following Systems of Linear Equations and find the point of intersection.**

1). $\left\{\begin{array}{c}y=4x+10\\y=3x-5\end{array}\right.$

2). $ \left\{\begin{array}{c}2x+y=8\\5x-y=4\end{array}\right.$

3). $\left\{\begin{array}{c}3x+4y=20\\2x+6y=14\end{array}\right.$

4). One week Beth bought 3 apples and 8 pears for $14.50. The next week she bought 6 apples and 4 pears and paid $14. Find the cost of 1 apple and the cost of 1 pear.

5). Brian bought beverages for his coworkers. One day he bought 3 lemonades and 4 iced teas for $12.00. The next day he bought 5 lemonades and 2 iced teas for $11.50. Find the cost of 1 lemonade and 1 iced tea, to the nearest cent.

6).

|  |  |  |
| --- | --- | --- |
| Number of Campers  | Sunnyside Campground | Green Mountain Campground |
| 1 | $58 | $40 |
| 2 | $66 | $50 |
| 3 | $74 | $60 |
| 4 | $82 | $70 |

7).

|  |  |  |
| --- | --- | --- |
| Number of IPODs | Best Buy Prices | F.Y.E Prices |
| 2 | $80 | $65 |
| 3 | $115 | $105 |
| 4 | $150 | $145 |

8). 9).

10). For which value of k does the system $\left\{\begin{array}{c}2x+y=3\\kx+y= -4\end{array}\right.$ have no solutions?

A). −4

B). −2

C). 2

D). 3