Algebra

Name_____

System Unit Review Day 1

Date_____ Period____

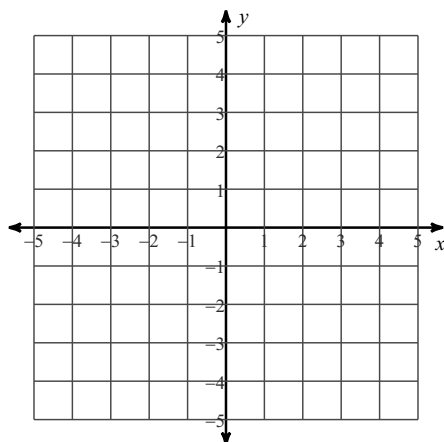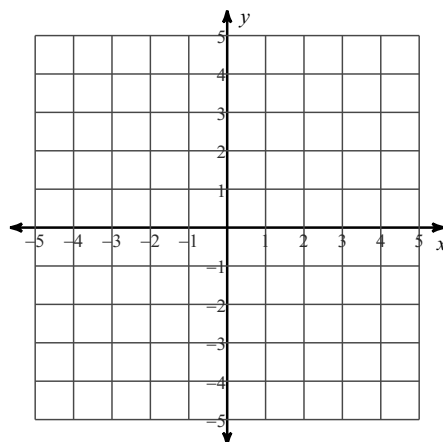**Solve each system by graphing.**

1) $3x - 2y = 4$
   $x - 4y = -12$

2) $x + y = 4$
   $x - 2y = -2$

Solve each system using the best method for how the system is setup.

3) $8x - 12y = 16$
   $6x - 6y = 12$

4) $-3x - 5y = -2$
   $5x + 7y = 6$

-1-

5) $y = 2x - 2$
   $y = 4x - 2$

6) $-3x + 3y = -9$
   $y = -6x - 24$

7) $-2x + 8y = 0$
   $2x + y = 18$

8) $5x + 3y = 21$
   $6x + 8y = 12$

Define your variables, setup a system of equations, show all algebra steps for solving the system using best method, and answer the question with a statement.

9) Mike and Gabriella are selling cheesecakes for a school fundraiser. Customers can buy pecan cheesecakes and apple cheesecakes. Mike sold 2 pecan cheesecakes and 8 apple cheesecakes for a total of $144. Gabriella sold 14 pecan cheesecakes and 10 apple cheesecakes for a total of $318. Find the cost each of one pecan cheesecake and one apple cheesecake.

10) Ndiba and Kristin are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of holiday wrapping paper. Ndiba sold 7 rolls of plain wrapping paper and 3 rolls of holiday wrapping paper for a total of $55. Kristin sold 6 rolls of plain wrapping paper and 14 rolls of holiday wrapping paper for a total of $150. What is the cost each of one roll of plain wrapping paper and one roll of holiday wrapping paper?

Answers to System Unit Review Day 1

1) $(4, 4)$ 2) $(2, 2)$ 3) $(2, 0)$ 4) $(4, -2)$

5) $(0, -2)$ 6) $(-3, -6)$ 7) $(8, 2)$ 8) $(6, -3)$

9) pecan cheesecake: $12, apple cheesecake: $15

10) roll of plain wrapping paper: $4, roll of holiday wrapping paper: $9