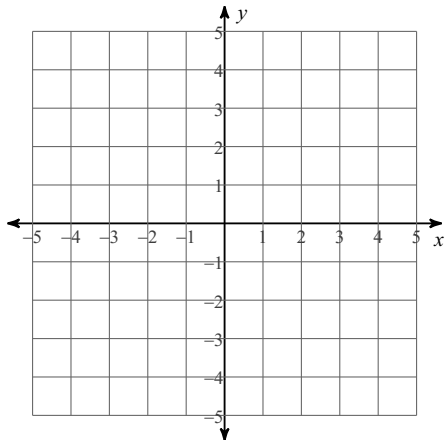


U2 SG Systems of Linear Equations

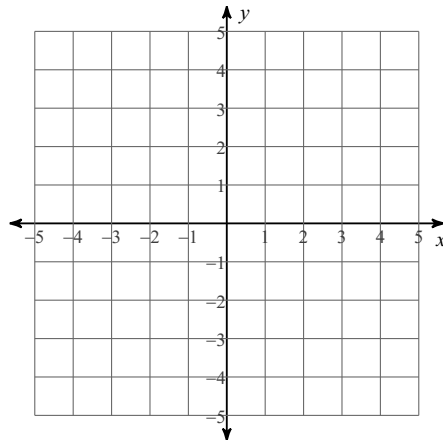
Date _____ Period _____

Solve each system by graphing.

$$1) \begin{aligned} y &= -x + 2 \\ y &= 2x - 1 \end{aligned}$$



$$2) \begin{aligned} 3 - y &= 0 \\ -9 &= -18x + 3y \end{aligned}$$

**Solve each system by substitution.**

$$3) \begin{aligned} y &= -3x - 7 \\ 3x + 2y &= -8 \end{aligned}$$

$$4) \begin{aligned} x - y &= -6 \\ 4x + 4y &= 0 \end{aligned}$$

Solve each system by elimination.

5) $-2x + 2y = -8$
 $2x + 2y = -4$

6) $4x - 2y = 4$
 $8x + 3y = -6$

- 7) Natalie and Krystal each improved their yards by planting rose bushes and geraniums. They bought their supplies from the same store. Natalie spent \$101 on 5 rose bushes and 6 geraniums. Krystal spent \$68 on 5 rose bushes and 3 geraniums. What is the cost of one rose bush and the cost of one geranium?

- 8) NOTE: Set up the linear system. DO NOT SOLVE

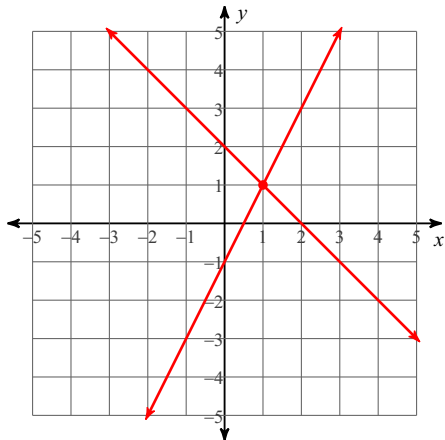
Mike and Aliyah are selling cookie dough for a school fundraiser. Customers can buy packages of sugar cookie dough and packages of gingerbread cookie dough. Mike sold 6 packages of sugar cookie dough and 5 packages of gingerbread cookie dough for a total of \$115. Aliyah sold 1 package of sugar cookie dough and 1 package of gingerbread cookie dough for a total of \$21. Find the cost each of one package of sugar cookie dough and one package of gingerbread cookie dough.

U2 SG Systems of Linear Equations

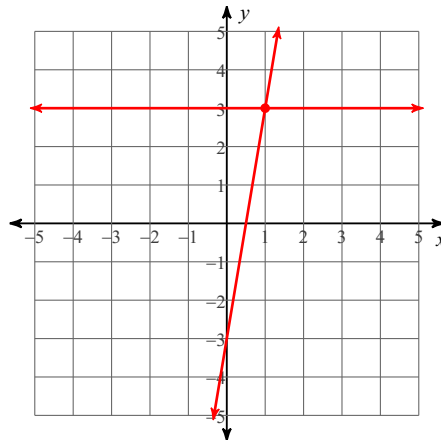
Date _____ Period _____

Solve each system by graphing.

$$1) \begin{aligned} y &= -x + 2 \\ y &= 2x - 1 \end{aligned}$$

 $(1, 1)$

$$2) \begin{aligned} 3 - y &= 0 \\ -9 &= -18x + 3y \end{aligned}$$

 $(1, 3)$ **Solve each system by substitution.**

$$3) \begin{aligned} y &= -3x - 7 \\ 3x + 2y &= -8 \end{aligned}$$

 $(-2, -1)$

$$4) \begin{aligned} x - y &= -6 \\ 4x + 4y &= 0 \end{aligned}$$

 $(-3, 3)$

Solve each system by elimination.

5) $-2x + 2y = -8$
 $2x + 2y = -4$

$(1, -3)$

6) $4x - 2y = 4$
 $8x + 3y = -6$

$(0, -2)$

- 7) Natalie and Krystal each improved their yards by planting rose bushes and geraniums. They bought their supplies from the same store. Natalie spent \$101 on 5 rose bushes and 6 geraniums. Krystal spent \$68 on 5 rose bushes and 3 geraniums. What is the cost of one rose bush and the cost of one geranium?

rose bush: \$7, geranium: \$11

- 8) NOTE: Set up the linear system. DO NOT SOLVE

Mike and Aliyah are selling cookie dough for a school fundraiser. Customers can buy packages of sugar cookie dough and packages of gingerbread cookie dough. Mike sold 6 packages of sugar cookie dough and 5 packages of gingerbread cookie dough for a total of \$115. Aliyah sold 1 package of sugar cookie dough and 1 package of gingerbread cookie dough for a total of \$21. Find the cost each of one package of sugar cookie dough and one package of gingerbread cookie dough.

package of sugar cookie dough: \$10, package of gingerbread cookie dough: \$11