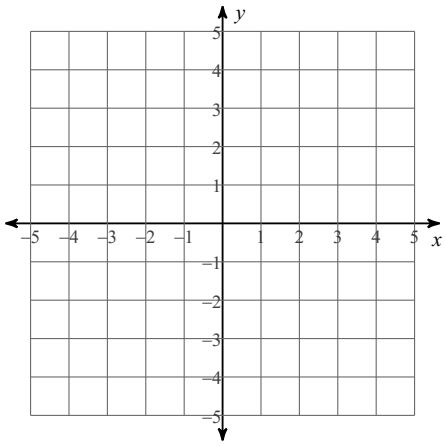
Algebra 1 Name_____ ID: 1

Assignment

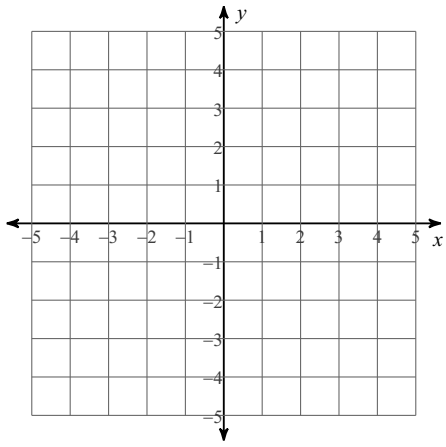
Date_____ Period____

Solve each system by graphing.

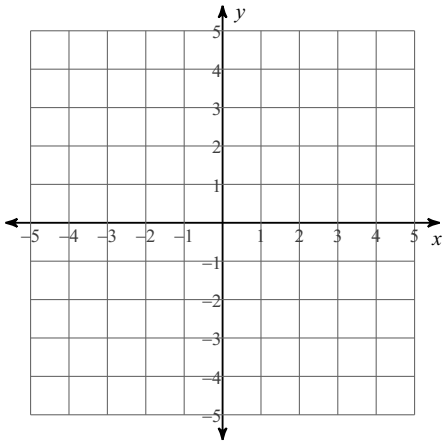
1) $y = 4x + 1$
$y = -x - 4$



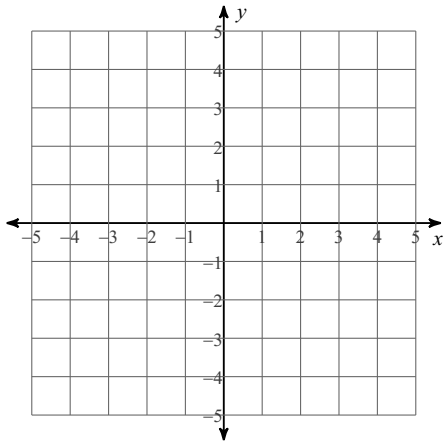
2) $y = x - 4$
$y = -7x + 4$



3) $y = -2x + 4$
$y = \frac{2}{3}x - 4$



4) $y = \frac{1}{3}x + 4$
$y = -\frac{1}{3}x + 2$



Solve each system by substitution.

5) $-6x + 6y = -6$
$y = 3x + 11$

6) $5x - 8y = 16$
$y = -2x - 23$

7) $y = -5x - 15$
$y = 3x + 1$

8) $6x - 3y = 15$
$x - 5y = 7$

Solve each system by elimination.

9) $-9x - 3y = 24$
$9x + 6y = -21$

10) $x + 5y = -23$
$x + 7y = -29$

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

12) $2x - 4y = 12$
$3x + 10y = 18$

13) Stephanie and Eduardo are selling cookie dough for a school fundraiser. Stephanie sold 10 packages of sugar cookie dough and 3 packages of oatmeal cookie dough for a total of $110. Eduardo sold 7 packages of sugar cookie dough and 4 packages of oatmeal cookie dough for a total of $96. Find the cost each of one package of sugar cookie dough and one package of oatmeal cookie dough.

14) The indoor climbing gym is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 8 vans and 11 buses with 717 students. High School B rented and filled 2 vans and 14 buses with 798 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.

15) A movie theater sells adult tickets for $9.00 each. Students receive a discount of $3.00 off. One evening the theater sold 636 tickets for a total of $4,974. How many tickets were sold to students?

16) If (x,y) is a solution to the system of equations given below, what is the value of y – x?

$x + y = 14$
$3x + y = 2$

Answers to Assignment (ID: 1)

1) $(-1, -3)$ 2) $(1, -3)$ 3) $(3, -2)$ 4) $(-3, 3)$
5) $(-6, -7)$ 6) $(-8, -7)$ 7) $(-2, -5)$ 8) $(2, -1)$
9) $(-3, 1)$ 10) $(-8, -3)$ 11) $(-5, 2)$ 12) $(6, 0)$
13) package of sugar cookie dough: \$8, package of oatmeal cookie dough: \$10
14) Van: 14, Bus: 55 15) 16)