Algebra 1

Name_____ ID: 1

Alg I Elimination Practice

Date_____ Period____

The New: Solve each system by elimination.

1) $-4x - 2y = 14$
   $-x + 2y = -14$

2) $-4x + y = -30$
   $2x - y = 12$

3) $10x + 6y = 15$
   $-20x - 12y = -16$

4) $12x - 8y = 0$
   $4x + 6y = -26$

5) $-14x + 10y = 2$
   $7x + 2y = 20$

6) $-4x + 2y = 16$
   $-3x + 6y = -15$

The Review: Solve each system by substitution.

7) $2x - 2y = 14$
   $y = 2x - 15$

8) $3x - y = -16$
   $y = 4x + 23$

9) $x + 2y = -17$
   $-3x - y = 16$
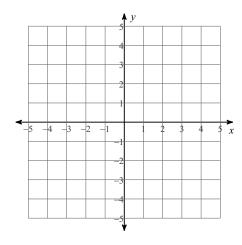
10) $5x + y = -9$
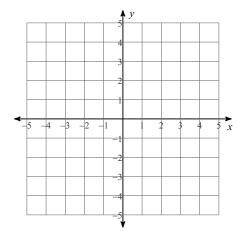 $-10x - 2y = 18$

The Review: Solve each system by graphing.

11) $y = \dfrac{3}{2}x - 3$

$y = \dfrac{1}{4}x + 2$

12) $y = x + 3$

$y = 8x - 4$

The Review: Solve by any method.

13) A boat traveled 288 miles downstream and back. The trip downstream took 9 hours. The trip back took 18 hours. Find the speed of the boat in still water and the speed of the current.

14) Trevon's school is selling tickets to a choral performance. On the first day of ticket sales the school sold 4 adult tickets and 9 child tickets for a total of $132. The school took in $160 on the second day by selling 8 adult tickets and 5 child tickets. What is the price each of one adult ticket and one child ticket?

Answers to Alg I Elimination Practice (ID: 1)

1) $(0, -7)$
2) $(9, 6)$
3) No solution
4) $(-2, -3)$
5) $(2, 3)$
6) $(-7, -6)$
7) $(8, 1)$
8) $(-7, -5)$
9) $(-3, -7)$
10) Infinite number of solutions
11) $(4, 3)$
12) $(1, 4)$
13) boat: 24 mph, current: 8 mph
14) adult ticket: $15, child ticket: $8