Math 1 - Systems of Equations Name_____ ID: 1

Practice Test Ch 5 - Version E

Date_____ Period____

Solve each system by graphing.

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

2) $x + y = -1$
$5x + y = 3$

Solve each system by elimination.

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

4) $-4x + 3y = 9$
$4x - 3y = -14$

5) $2x - 3y = -3$
$x + 3y = -15$

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

7) $-10x + 8y = 2$
$x - 2y = -5$

8) $10x + 10y = -10$
$6x + 5y = 3$

Solve each system by substitution.

9) $-x + 3y = -2$
$y = -3x - 4$

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

11) The school that Paul goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 8 senior citizen tickets and 10 child tickets for a total of $116. The school took in $20 on the second day by selling 2 senior citizen tickets and 1 child ticket. Find the price of a senior citizen ticket and the price of a child ticket.

Solve each equation.

12) $-10\left|8n\right| = -80$

13) $-5p + 7(p + 8) = 40 - 6p$

Solve each compound inequality.

14) $-74 \le -4 + 7n \le -46$

Write the equation of the line described.

15) through: $(2, 3)$, parallel to $y = -\frac{2}{5}x + 5$

16) through: $(5, -5)$, perp. to $y = \frac{5}{9}x + 4$

Write equation of the line through the given points.

17) through: $(0, -2)$ and $(3, -3)$

Sketch the graph of each linear inequality.

18) $y \le x - 3$

Sketch the solution to each system of inequalities.

19) $y \ge \frac{1}{3}x - 2$

$y > \frac{4}{3}x + 1$