Algebra 1 Ch. 6 review
Quiz Mon. 6.5- 6.6

Example 6

Solve the system of inequalities by graphing.

$y < 3x + 1$
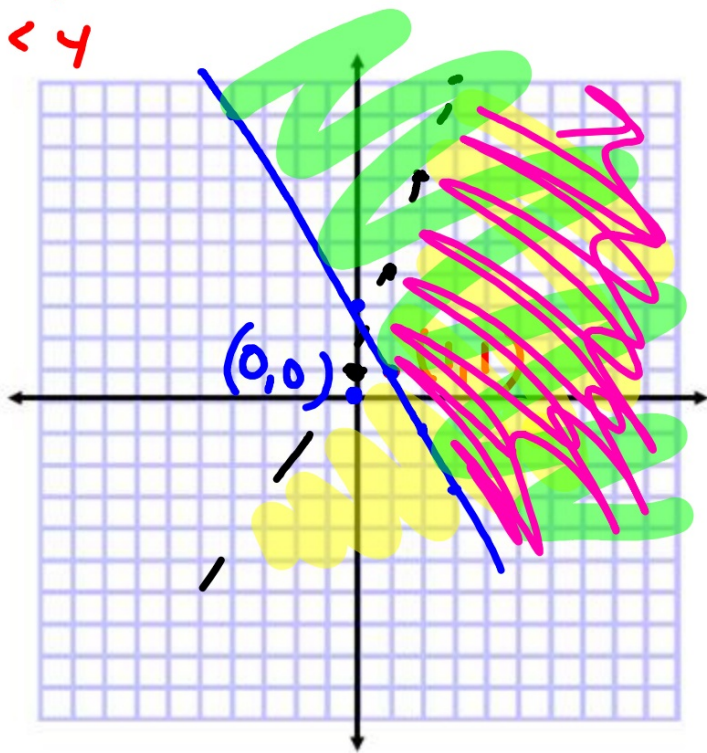
$y \geq -2x + 3$

$1 < 3 \cdot 1$

$1 < 4$

$0 \geq 0 + 3$

$0 \geq 3$

$y = 3x + 1$

$\overline{1}$

$y = \dfrac{-2x}{1} + 3$

(0,0)

49. COINS Tionna has saved dimes and quarters in her
$\overset{.10}{x}$ $\overset{.25}{y}$
piggy bank. Define the variables, and write a system of
equations to determine the number of dimes and
quarters. Then solve the system using the best method
for the situation.

$x + y = 25$

$15 + y = 25$
$-15 \quad -15$

15 dimes
10 quarters

$4.00
25 coins

150
250

$1x + 1y = 25 \xrightarrow{-0.25}$

$.10x + .25y = 4.00$

$-0.25x + -0.25y = -6.25$

$\dfrac{-0.15x}{-0.15} = \dfrac{-2.25}{-0.15}$

$x = 15$

Graph each system and determine the number of solutions
that it has. If it has one solution, name it. (Lesson 6-1)

3. $y = 2x - 3$
   $y = x + 4$

one
cons. + indep
$(10, 14)$
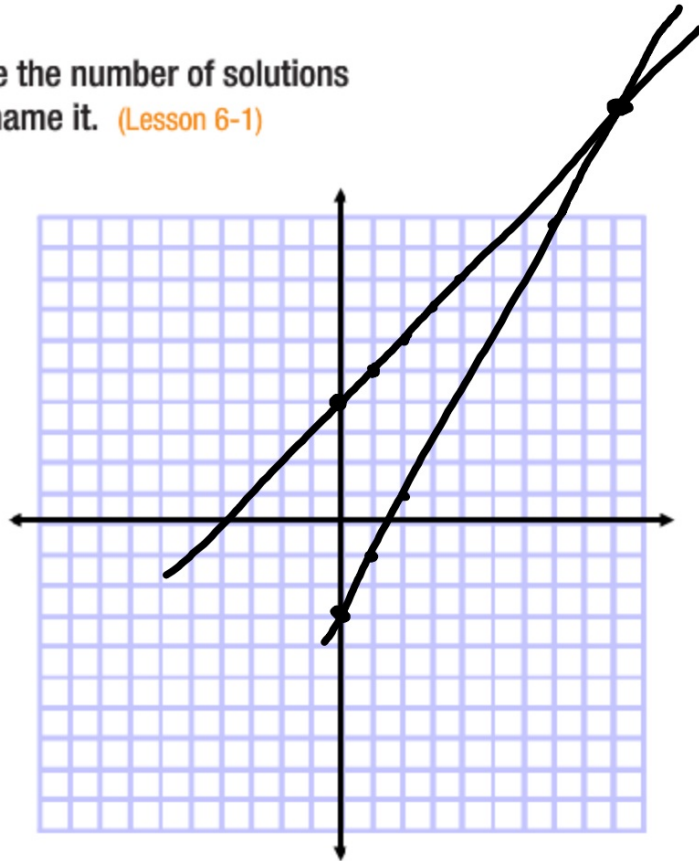
Use substitution to solve each system of equations.

9. $y = x + 4$
$2x + y = 16$

10. $y = -2x - 3$
$x + y = 9$

Use elimination to solve each system of equations.
(Lessons 6-3 and 6-4)

16. $x + y = 9$
$x - y = -3$

17. $x + 3y = 11$
$x + 7y = 19$

$\smile (-2,2)$

Example 5

Determine the best method to solve the system of
equations. Then solve the system.

$-6 + 10 = 4$

$3 \cdot -2 + 5 \cdot 2 = 4$

$3x + 5y = 4$
$4x + y = -6$ $\xrightarrow{-5}$

$3x + 5y = 4$
$-20x + -5y = 30$

$4 \cdot -2 + y = -6$

$-8 + y = -6$

$+8 \qquad +8$

$y = 2$

$\dfrac{-17x}{-17} = \dfrac{34}{-17}$

$x = -2$

PT p.383
odds 1-23