Algebra 1 Ch. 6 review
Quiz 6.5- 6.6
whiteboards?

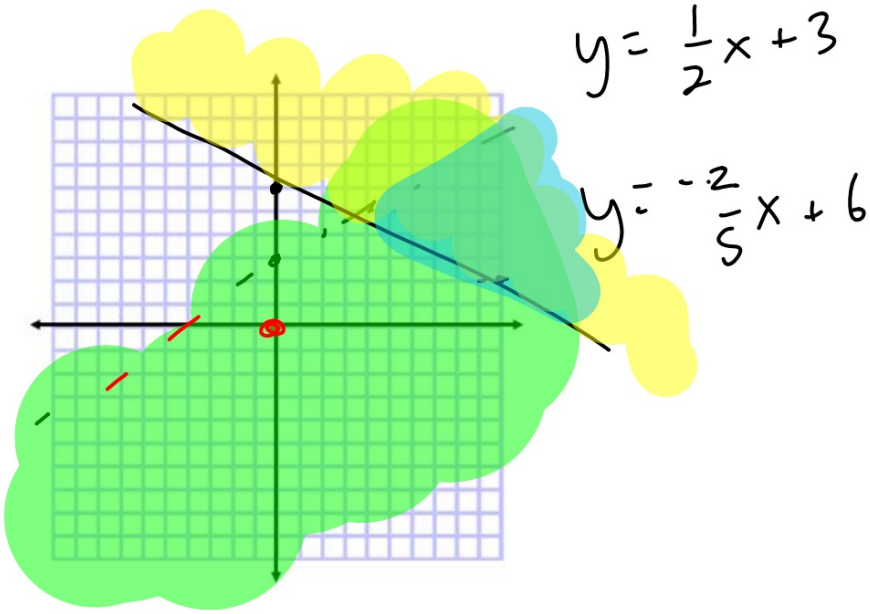
$y < \frac{1}{2}x + 3$

$0 < 0 + 3$

$y \geq \frac{-2}{5}x + 6$

$0 \geq 0 + 6$

$0 \geq 6$



Example 6

Solve the system of inequalities by graphing.

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

$d = .10 \quad q = .25$

49. COINS Tionna has saved dimes and quarters in her 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.

$10d + 25q = 4$

10 quarter
15 dimes

$.10d + .25q = 4.00$

$(d + q = 25) \cdot -0.10$

$-.10d - .10q = -25$

$.15q = 1.50$

$\frac{.15q}{.15} = \frac{1.50}{.15}$

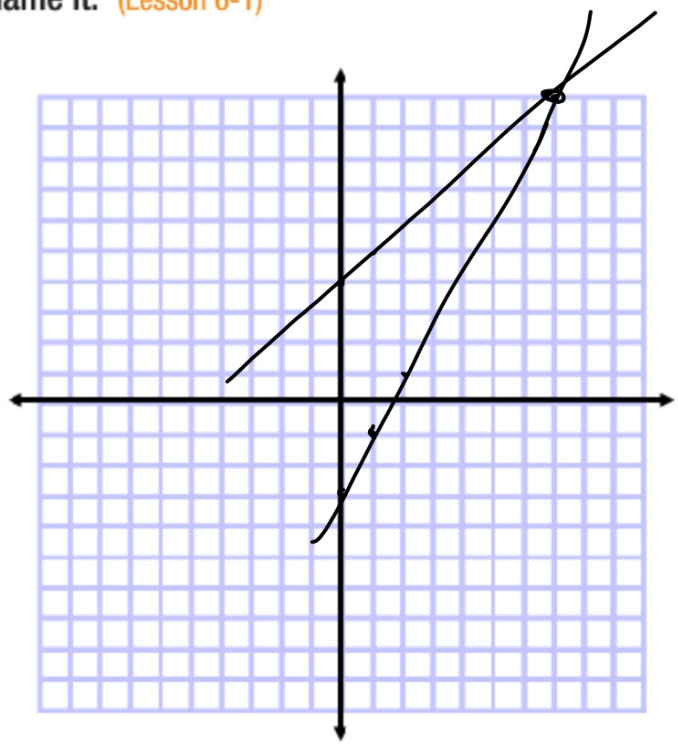
$q = 10$

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

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

(7, 11)

Cons. & indep



$y = x + 4$

Use substitution to solve each system of equations.

(Lesson 6-2)

$(4, 8)$

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

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

$2 \cdot 4 + 8 = 16$
$8 + 8 = 16$

$2x + (x + 4) = 16$

$3x + 4 = 16$
$-4 \quad -4$

$\frac{3x}{3} = \frac{12}{3}$

(3, 6)

Use elimination to solve each system of equations.

(Lessons 6-3 and 6-4)

3 + y = 9

16. ~~$x + y = 9$~~

$x - y = -3$

3 + 6 = -3

$2x = 6$

$\frac{2x}{2} = \frac{6}{2}$

$x = 3$

17. $x + 3y = 11$ → $-x + -3y = -11$

$x + 7y = 19$ $\quad x + 7y = 19$

Example 5

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

$3x + 5y = 4$
$4x + y = -6$