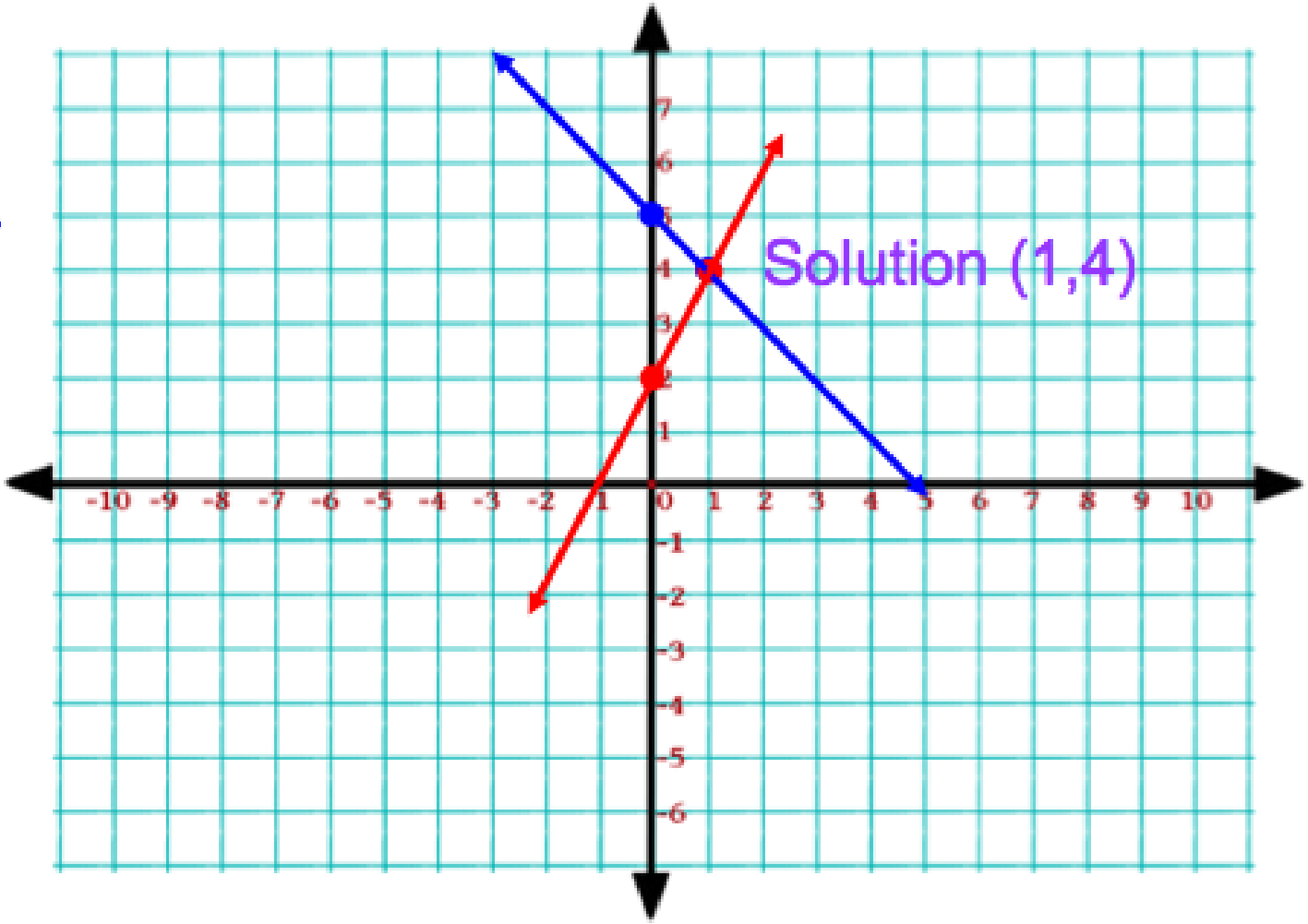
Solve the linear system by graphing.

1) $x + y = 5$

$y - 2 = 2x$

$y = -1x + 5$

$y = 2x + 2$



Must get the equations into slope-intercept form; $y = mx + b$

slope y-intercept

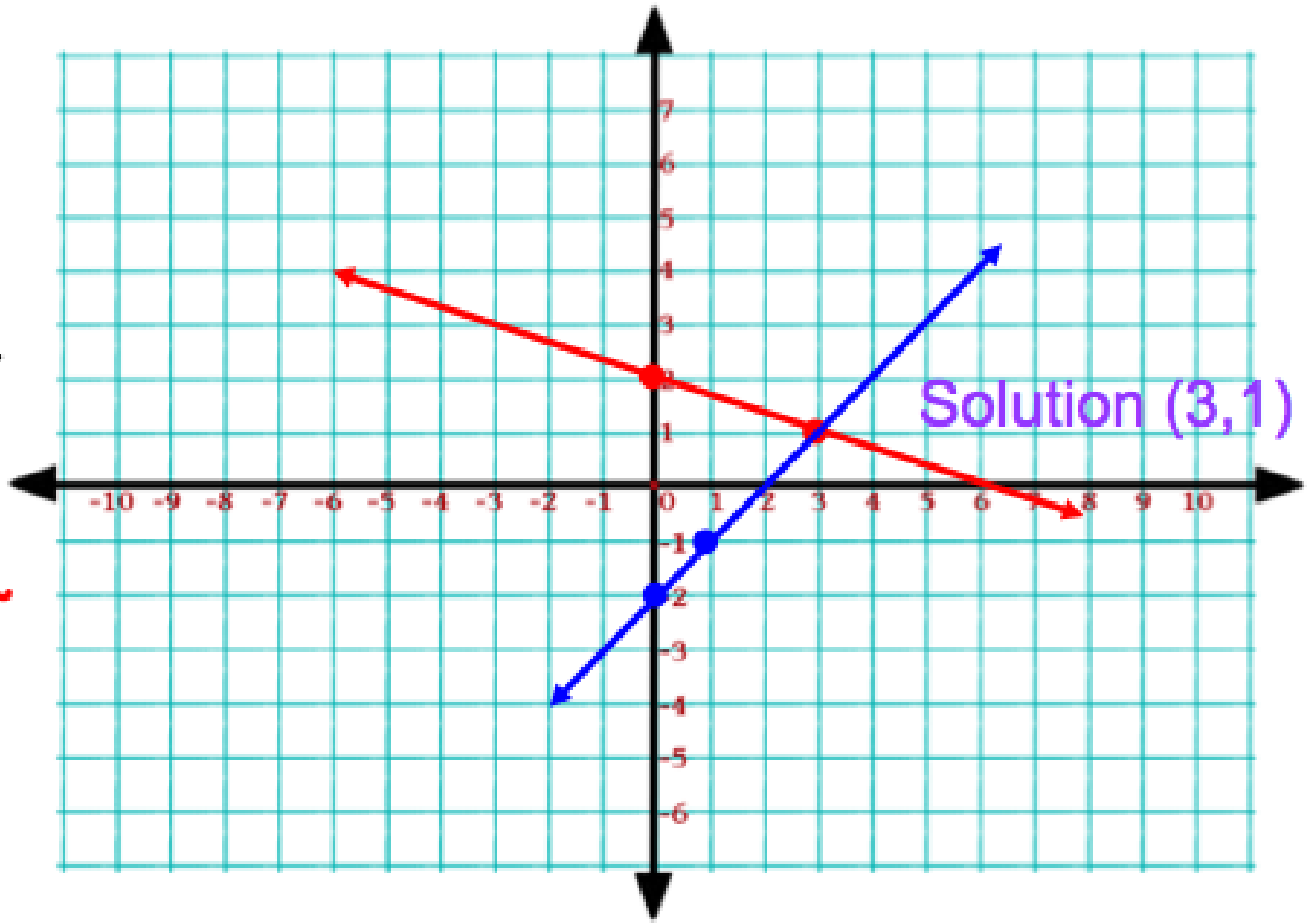
Solve the linear system by graphing.

2) $y = x - 2$

$x + 3y = 6$

$$\frac{3y}{3} = \frac{-1x}{3} + \frac{6}{3}$$

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



Solve the linear system by graphing.

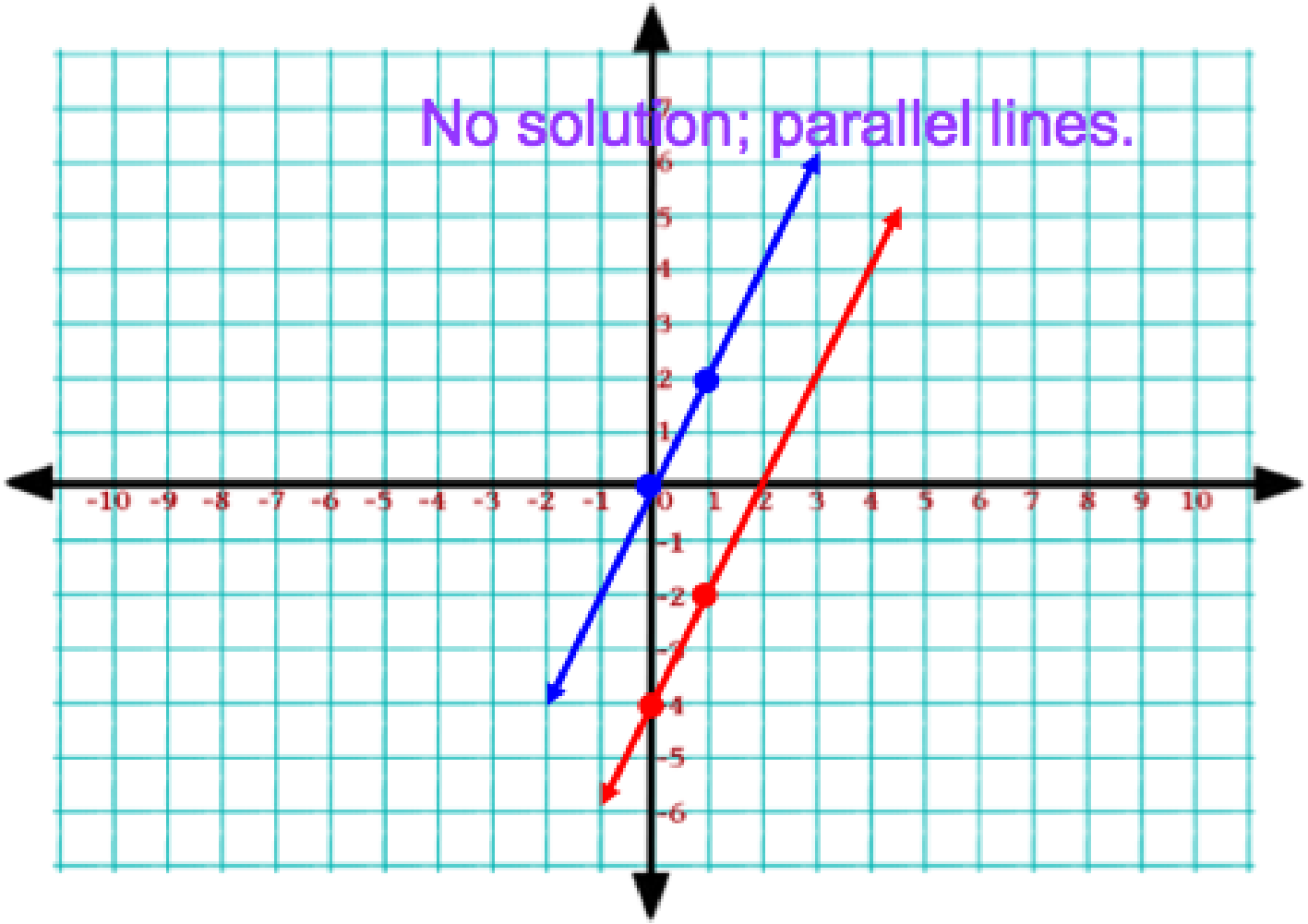
3) $-2x + y = 0$

$y = 2x - 4$

$y = 2x + 0$

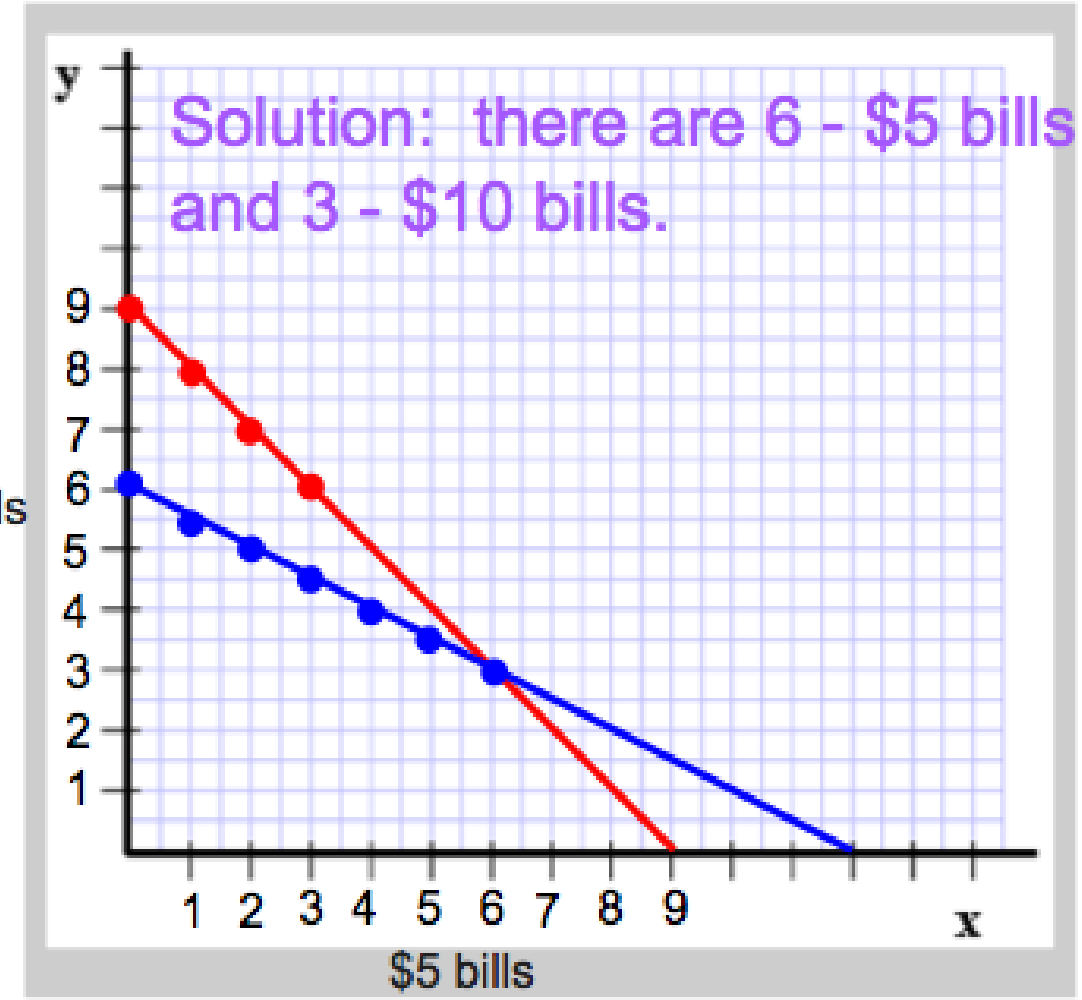
or

$y = 2x$



Michael has 9 bills in his wallet.
Those bills are $5s and $10s.
The total amount in his wallet is $60.
Write a system of equations for this situation. Then solve by graphing.
Explain the solution.
Must write the equations into slope-intercept form for graphing.

x = $5 bills
y = $10 bills



$5x + 10y = 60$
$x + y = 9$

$$\frac{10y}{10} = \frac{-5x}{10} + \frac{60}{10}$$

$$y = -\frac{1}{2}x + 6$$

$$y = -1x + 9$$

Solve the linear system using the substitution method.

$x + 2y = -4$

$-2x + y = 3$

$y = 2x + 3$

$x + 2(2x + 3) = -4$

$x + 4x + 6 = -4$

$5x = -10$

$x = -2$

$y = 2(-2) + 3$

$y = -4 + 3$

$y = -1$

Solution $(-2, -1)$

You are buying the meat for a cookout. You need to buy 8 packages of meat. A package of hotdogs cost $1.89 and a package of hamburgers cost $5.19. You spend $31.62 at the store. Using a system of equations, find the number of packages of each type of meat.

x = packages of hotdogs

y = packages of burgers

Equations:

1.89x + 5.19y = 31.62

x + y = 8

$x = 8 - y$

$1.89(8 - y) + 5.19y = 31.62$

$15.12 - 1.89y + 5.19y = 31.62$

$15.12 + 3.3y = 31.62$

$3.3y = 16.5$

$y = 5$

You bought 3 packages of hotdogs and 5 packages of burgers.