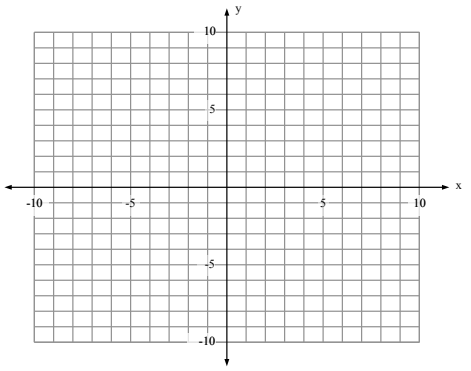
Chapter 7 Review

Sections 7.1 – 7.4
Solving Systems of Equations

#1

Graph and **check** to solve the linear system.

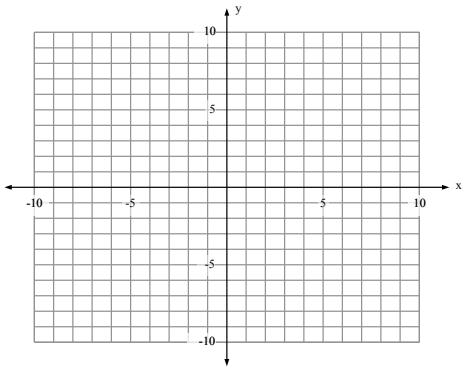
$y = -x + 6$
$y = 2x - 6$



#2

Graph and **check** to solve the linear system.

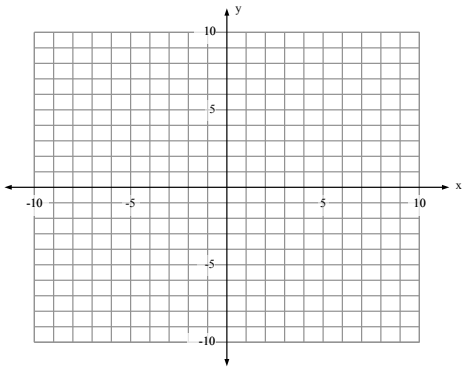
$5x - y = -5$
$3x + 6y = -3$



#3

Graph and **check** to solve the linear system.

$-x + 2y = 10$
$3x + 6y = 6$



#4

Use the **substitution** method to solve the linear system.

$4x + y = 26$

$y = x - 4$

#5

Use the **substitution** method to solve the linear system.

$x + 3y = 9$

$4x - 2y = -6$

#6

Use the **substitution** method to solve the linear system.

$-x + 3y = 24$

$5x + 8y = -5$

#7

Use **elimination** to solve the linear system.

$3x + y = 10$

$x + 5y = 8$

#8

Use **elimination** to solve the linear system.

$4x - 30y = -20$

$-4x + 5y = -30$

#9

Use **elimination** to solve the linear system.

$5x + 4y = 10$

$3x + 3y = 9$

#10

In early spring, you buy 6 potted tomato plants for your garden. The 8-inch potted plants sell for $5 and the 10-inch potted plants sell for $8. If you spend $36, how many of each size are you buying?

#11

A store sold 28 pairs of cross-trainer shoes for a total of $2220. *Nike* shoes sold for $70 per pair and *Adidas* shoes sold for $90 per pair. How many of each style were sold?

#12

Solve the linear system and tell **how many solutions** the linear system has.

$2x - 3y = 1$

$-2x + 3y = 1$

#13

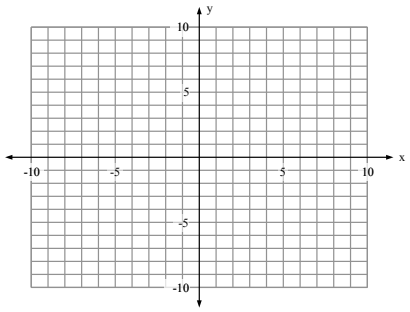
Solve the linear system and tell **how many solutions** the linear system has.

$3x + y = -1$

$-9x - 3y = 3$

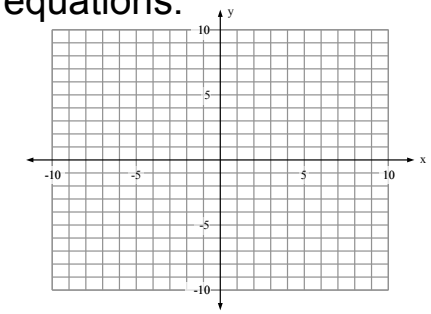
#14

Describe what the lines would look like if there is **no solution** to the system of equations.



#15

Describe what the lines would look like if there are **infinitely many solutions** to the system of equations.



#16

Is the point (-4,-3) a solution to the system?

$8x - y = -29$

$-9x - 3y = 26$