

# Algebra CH10 Practice Test

1. Is  $(-3, 2)$  a solution to the system below?

$$\begin{aligned} -4x + 2y &= 14 \\ -x + y &= 1 \end{aligned}$$

2. Solve this system by graphing (by hand).

$$\begin{aligned} 2x - y &= 2 \\ 4x + 3y &= 24 \end{aligned}$$

3. Solve this system using substitution.

$$\begin{aligned} -x + y &= 1 \\ 2x + y &= -2 \end{aligned}$$

4. Solve using Elimination/Addition/Linear Combination

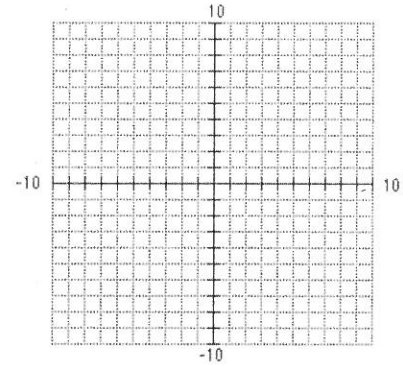
$$\begin{aligned} 2x - 4y &= 8 \\ x + 2y &= 5 \end{aligned}$$

5. Determine how many solutions each system has

a.  $\begin{aligned} y &= 4x - 1 \\ 2x + y &= 11 \end{aligned}$

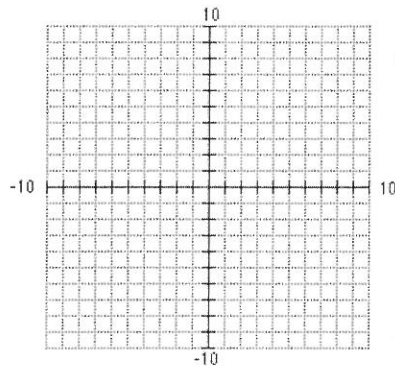
b.  $\begin{aligned} 3x - 2y &= 6 \\ -6x + 4y &= -12 \end{aligned}$

c.  $\begin{aligned} -2x + 4y &= 1 \\ x - 2y &= 3 \end{aligned}$

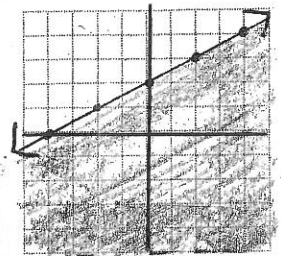


6. Graph the inequality

$$2x + y < 3$$

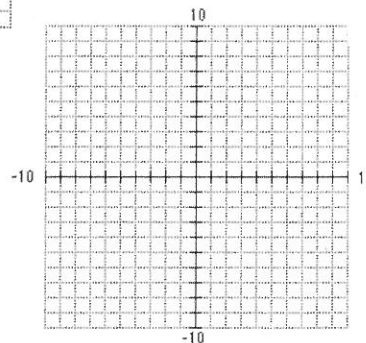


7. Write the inequality graphed



8. Graph the system of inequalities

$$\begin{aligned} y &\geq -x + 1 \\ x - y &> 4 \end{aligned}$$



9. Find the solution(s) to this system:

$$\begin{aligned} y &= \frac{1}{4}(x-3)^2 \\ 3x - 2y &= 13 \end{aligned}$$