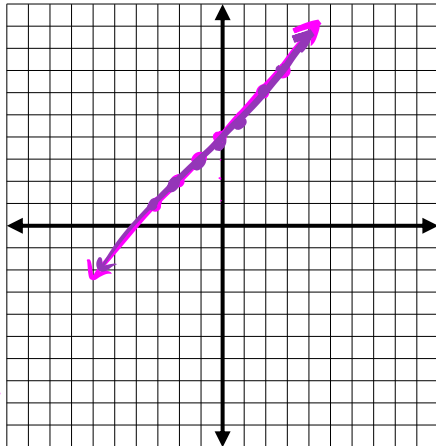


Graph the following systems of equations and find the solution to the system of equations.

1. $y = x + 4$
 $-2x + 2y = 8$

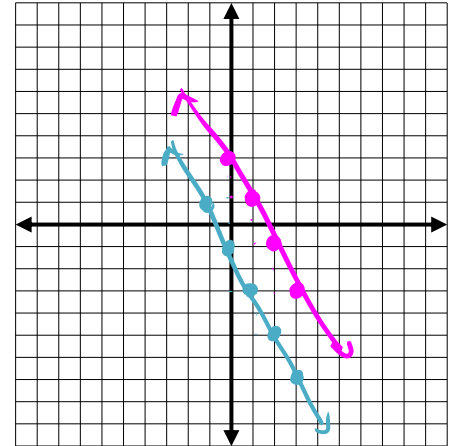
$\frac{2y}{2} = \frac{2x+8}{2}$
 $y = x + 4$

same equation!



Solution: Infinite Solutions

2. $y = -2x + 3$
 $3y = -6x + 9$
 $y = -2x - 1$



Solution: NO SOLUTION

Solve the system of equations. Decide if it has one solution, all solutions, or no solution.

3. $4x + y = 3 \Rightarrow -12x - 3y = -9$
 $12x + 3y = 9 \Rightarrow 12x + 3y = 9$
 $0 = 0$

Infinite Solutions

4. $y = -x + 5$
 $x + y = -12$

$x + -x + 5 = -12$
 $5 = -12$

NO SOLUTION

Solve the systems of equations using WHATEVER method you want! Explain WHY you picked the method you picked.

5. $x = -4y$
 $3x + 2y = 20$
 $3(-4y) + 2y = 20$
 $-12y + 2y = 20$
 $-10y = 20$
 $y = -2$
 $x = -4(-2)$
 $x = 8$
 $(8, -2)$

6. $2x + 5y = 3 \Rightarrow 2x + 5y = 3$
 $2(-x + 3y = -7) \Rightarrow -2x + 6y = -14$
 $-x + 3(-1) = -7$
 $-x - 4 = -7$
 $-x = -3$
 $x = 3$
 $11y = -11$
 $y = -1$
 $(3, -1)$

