“PRACTICE” QUIZ 1... Solving Linear Systems of Equations by Graphing and Algebraically

Section 1: Graph each system and identify the solution.

1) \( y = -1 \)
   \( x = 3 \)

2) \( y = -x + 3 \)

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

4) \(-4y - 12x + 8 = 0 \)
   \( y + 2 = x \)

5) \(3y = -3x + 6 \)
   \( x + y = 4 \)

6) \( x + y = 0 \)
   \( y = -x \)

Section 2: Given the graph of a system of equations, identify the solution.

7) Solution: (-1, 0)

8)

9)

Section 3: Decide whether the ordered pair is a solution the system of linear equations. Write Yes or No.

10) System:
    \[ 4x + y = -4 \]
    \[-x - y = 1 \]
    Solution: (-1, 0)
Section 4: Solve each system using the “Substitution Method.” Check your answers!

11) \begin{align*} x + y &= 8 \\ y &= 3x \end{align*}

12) \begin{align*} y &= 5 - 2x \\ 3x - 2y &= 11 \end{align*}

13) \begin{align*} x &= -4 \\ -2x - y &= 18 \end{align*}

14) \begin{align*} 4x - y &= 11 \\ 2x + 2y &= 18 \end{align*}

Section 5: Solve each system using the “Combinations / Elimination Method.” Check your answers!

15) \begin{align*} x - y &= 4 \\ x + y &= 10 \end{align*}

16) \begin{align*} x - y &= -5 \\ x + 2y &= 4 \end{align*}

17) \begin{align*} 7x + 2y &= 10 \\ -14x + 2y &= -32 \end{align*}

18) \begin{align*} \frac{2}{3}x &= -70 + y \\ \frac{1}{3}x - \frac{2}{3}y &= 43 \end{align*}

Section 6: Short Answer. Use complete sentences.

19) Find and describe the error in the following “combinations / elimination” work.

Response:

[Diagram showing incorrect steps]

20) How many answers does the following system of equations have? One, two, none, or infinitely many? Explain your answer.

Response: