

13-11-13-T8

Solve for each unknown.

$$1) \begin{aligned} 0 &= 5y - 3x - 13 \\ -4x &= 4y - 4 \end{aligned}$$

$$2) \begin{aligned} \frac{5}{3}x &= y + \frac{8}{3} \\ 4y + 6 &= 2x \end{aligned}$$

$$3) \begin{aligned} -5y - 4x &= 2 \\ -x + \frac{2}{5} &= \frac{4}{5}y \end{aligned}$$

$$4) \begin{aligned} 5x + 6y - 10 &= 0 \\ -1 + \frac{1}{2}x &= -\frac{1}{2}y \end{aligned}$$

$$5) \begin{aligned} -\frac{28}{5} &= -2x - \frac{12}{5}y \\ -17 - 5y &= -3x \end{aligned}$$

$$6) \begin{aligned} 40x &= 10y \\ -24x &= -6y \end{aligned}$$

$$7) \begin{aligned} 0 &= 20y - 8x \\ -6x + 15y &= 6 \end{aligned}$$

$$8) \begin{aligned} -6y + 12 &= -6x \\ -4y + 2x + 8 &= 0 \end{aligned}$$

$$9) \begin{aligned} 3 + 3x &= 5y \\ 4x &= -2 + 6y \end{aligned}$$

$$10) \begin{aligned} 4y &= -16 + 6x \\ 0 &= -5x + 5y + 10 \end{aligned}$$

$$11) \begin{aligned} y + \frac{5}{2} &= \frac{5}{6}x \\ -1 + \frac{1}{3}x + \frac{2}{3}y &= 0 \end{aligned}$$

$$12) \begin{aligned} -4x + 4y - 4 &= 0 \\ -12x &= -10y \end{aligned}$$

$$13) \begin{aligned} 6x + 9 - 5y &= 0 \\ -6y &= -4x - 14 \end{aligned}$$

$$14) \begin{aligned} \frac{4}{3}y &= 1 - x \\ 4x + 3y &= 4 \end{aligned}$$

$$15) \begin{aligned} -3y &= -2x + 3 \\ 0 &= -3x - 8 + 2y \end{aligned}$$

$$16) \begin{aligned} 0 &= 1 - \frac{3}{4}y - \frac{5}{4}x \\ -3x &= 18 - 5y \end{aligned}$$

$$17) \begin{aligned} 0 &= -x + \frac{3}{2}y \\ y + \frac{1}{5} &= \frac{3}{5}x \end{aligned}$$

$$18) \begin{aligned} -4y &= 8 + 4x \\ \frac{3}{5}x &= -y \end{aligned}$$

Answers to 13-11-13-T8

1) $(-1, 2)$

5) $(4, -1)$

8) $(0, 2)$

12) $(5, 6)$

16) $(-1, 3)$

2) $(1, -1)$

6) Infinite number of solutions

9) $(4, 3)$

13) $(1, 3)$

17) $(-3, -2)$

3) $(2, -2)$

10) $(4, 2)$

14) $(1, 0)$

18) $(-5, 3)$

4) $(2, 0)$

7) No solution

11) $(3, 0)$

15) $(-6, -5)$