

Must show work! Example on back.

SUBSTITUTION METHOD WORKSHEET

$$1) \begin{aligned} 2x + 8y &= 20 \\ y &= 2 \end{aligned}$$

$$2) \begin{aligned} x &= 5 \\ 2x + y &= 10 \end{aligned}$$

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

$$4) \begin{aligned} 2y + x &= -15 \\ x &= 3y \end{aligned}$$

$$5) \begin{aligned} 4x + 7y &= 19 \\ y &= x + 9 \end{aligned}$$

$$6) \begin{aligned} y &= 6x + 11 \\ 2y - 4x &= 14 \end{aligned}$$

$$\text{Ex. } y = 2x + 4$$

$$3x + y = 9$$

$$\text{Step 1) } 3x + 2x + 4 \neq 9$$

Plug in $2x+4$
for y .

Solve for
 x .

$$\begin{array}{r} 5x + 4 \neq 9 \\ -4 \quad \quad \quad -4 \\ \hline 5x \neq 5 \\ \hline 5 \quad \quad \quad 5 \\ x \neq 1 \end{array}$$

Write

$$\text{Step 2) } y = 2x + 4$$

one of the
original equations.

Plug in 1 for x .

$$y = 2(1) + 4$$

$$\begin{array}{r} y = 2 + 4 \\ \hline y = 6 \end{array}$$

$$\text{Step 3) } (1, 6)$$

Write ordered pair