

Systems of Equations Worksheet 23

Solve each system of equations. Remember to write your answers as an ordered pair, i.e. (x, y) .

$$1. \begin{cases} 2x + y = 10 \\ 3y = 7x + 17 \end{cases}$$

$$2. \begin{cases} y = 2x + 5 \\ 2y - 7 = x \end{cases}$$

$$3. \begin{cases} 3x = -33 - 3y \\ 4y = 2x - 2 \end{cases}$$

$$4. \begin{cases} 5x = 9y + 5 \\ 2x = 2 - 8y \end{cases}$$

$$5. \begin{cases} -3y = -6 \\ 9y = 18 \end{cases}$$

$$6. \begin{cases} -3x + 4y = 22 \\ 6x + 9y = -27 \end{cases}$$

$$7. \begin{cases} \frac{1}{5}x = \frac{8}{7}y - \frac{3}{5} \\ -\frac{3}{10}x = \frac{9}{10} - \frac{12}{7}y \end{cases}$$

$$8. \begin{cases} \frac{2}{7}x - \frac{4}{5}y = \frac{216}{35} \\ y = \frac{10}{28}x + \frac{2}{5} \end{cases}$$

$$9. \begin{cases} -\frac{9}{5}x - \frac{1}{4}y = \frac{73}{5} \\ -\frac{2}{9}x - \frac{7}{10}y = \frac{322}{45} \end{cases}$$

$$10. \begin{cases} -\frac{5}{8}x + \frac{3}{10}y = \frac{11}{80} \\ 0x - \frac{1}{2}y = \frac{4}{3} \end{cases}$$

$$11. \begin{cases} x - \frac{5}{7}y = -\frac{148}{63} \\ -2x - \frac{4}{7}y = -\frac{40}{63} \end{cases}$$

$$12. \begin{cases} -7x - y = -\frac{65}{7} \\ -\frac{4}{5}x - \frac{5}{7}y = -\frac{31}{49} \end{cases}$$