

Substituting Systems of Equations

Date _____

Solve each system by substitution.

$$\begin{aligned} 1) \quad y &= 2x - 14 \\ y &= x - 10 \end{aligned}$$

$$\begin{aligned} 2) \quad y &= x - 5 \\ y &= -7x + 3 \end{aligned}$$

$$\begin{aligned} 3) \quad y &= 2x + 2 \\ 6x - 2y &= -12 \end{aligned}$$

$$\begin{aligned} 4) \quad 4x + y &= 11 \\ -6x + 6y &= -24 \end{aligned}$$

$$\begin{aligned} 5) \quad -x + 3y &= 19 \\ y &= 2x + 18 \end{aligned}$$

$$\begin{aligned} 6) \quad -2x + 3y &= -13 \\ -3x + 5y &= -23 \end{aligned}$$

$$\begin{aligned} 7) \quad & 7x + 4y = 7 \\ & -x + 2y = -19 \end{aligned}$$

$$\begin{aligned} 8) \quad & y = 2x - 3 \\ & 4x - 2y = -5 \end{aligned}$$

$$\begin{aligned} 9) \quad & x + 5y = 21 \\ & -3x - 3y = -15 \end{aligned}$$

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

- 11) Fabulously Fit offers memberships for \$35 per month plus a \$50 enrollment fee. The Fitness Studio offers memberships for \$40 per month plus a \$35 enrollment fee. In how many months will the fitness clubs cost the same? What will the cost be?

- 12) Kate bought 3 used CDs and 1 used DVD at the bookstore. Her friend Joel bought 2 used CDs and 2 used DVDs at the same store. If Kate spent \$20 and Joel spent \$22, determine the cost of a used CD and a used DVD.