

## 5.2B Using Substitution to Solve Systems of Equations

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each system by substitution.**

1) 
$$\begin{aligned}x + 4y &= -22 \\ -8x - 5y &= -40\end{aligned}$$

2) 
$$\begin{aligned}y &= 16x - 18 \\ -10x - 2y &= -48\end{aligned}$$

3) 
$$\begin{aligned}y &= -4x - 8 \\ -12x - 4y &= 16\end{aligned}$$

4) 
$$\begin{aligned}-7x - y &= 30 \\ x + y &= 6\end{aligned}$$

$$5) \begin{aligned} -6x + 3y &= -21 \\ -17x + y &= 38 \end{aligned}$$

$$6) \begin{aligned} y &= -2x - 6 \\ 20x + 8y &= -48 \end{aligned}$$

**Solve the system of linear equations by graphing. Show all work.**

$$7) \begin{aligned} -8y - 3x &= -64 \\ 16y &= -304 - 33x \end{aligned}$$

