

Section 9.2 Focus Exercises

Use the substitution method to find the solution, if possible. If the lines are parallel, indicate that by writing **inconsistent**; if the lines are the same line, indicate that by writing **dependent**. Also, verify your answers.

$$1. \quad \begin{cases} y = 3x + 9 \\ y = -2x - 1 \end{cases}$$

$$2. \quad \begin{cases} y = x + 3 \\ y = 3x - 1 \end{cases}$$

$$3. \quad \begin{cases} x + y = 2 \\ y = \frac{1}{2}x - 4 \end{cases}$$

$$4. \quad \begin{cases} y = \frac{2}{3}x + 2 \\ 2x + 3y = -6 \end{cases}$$

$$5. \quad \begin{cases} y = 2x + 2 \\ 4x + y = 5 \end{cases}$$

$$6. \quad \begin{cases} x - y = -4 \\ 4x + 2y = -10 \end{cases}$$

$$7. \begin{cases} 6x - 3y = 12 \\ y = 2x - 4 \end{cases}$$

$$8. \begin{cases} y = -2x + 4 \\ 3x - y = 6 \end{cases}$$

$$9. \begin{cases} y = -\frac{1}{3}x + 4 \\ x + 3y = -3 \end{cases}$$

$$10. \begin{cases} y = \frac{4}{3}x - 2 \\ y = \frac{1}{2}x + 3 \end{cases}$$

$$11. \begin{cases} y = \frac{3}{4}x + 11 \\ x + 2y = 2 \end{cases}$$

$$12. \begin{cases} y = \frac{1}{3}x - 1 \\ y = \frac{5}{6}x - 4 \end{cases}$$