

Solving Systems with Elimination

Solve each system by elimination.

$$\begin{aligned} 1) \quad & 5x - 5y = -5 \\ & -5x + 8y = 14 \end{aligned}$$

$$\begin{aligned} 2) \quad & -9x - 7y = -24 \\ & 7x + 7y = 14 \end{aligned}$$

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

$$\begin{aligned} 4) \quad & -10x - y = -24 \\ & -4x - y = -6 \end{aligned}$$

$$\begin{aligned} 5) \quad & -x + 2y = -5 \\ & -x - 3y = -10 \end{aligned}$$

$$\begin{aligned} 6) \quad & -2x - 5y = 26 \\ & -2x - 5y = 28 \end{aligned}$$

$$\begin{aligned} 7) \quad & 10x - 6y = -14 \\ & 4x - 6y = -20 \end{aligned}$$

$$\begin{aligned} 8) \quad & 2x - 3y = -5 \\ & 8x - 10y = -14 \end{aligned}$$

$$\begin{aligned} 9) \quad -12x + y &= 12 \\ 4x + 10y &= -4 \end{aligned}$$

$$\begin{aligned} 10) \quad -15x + 12y &= 27 \\ 5x - 4y &= -9 \end{aligned}$$

$$\begin{aligned} 11) \quad 9x - 9y &= 9 \\ 5x - 4y &= -4 \end{aligned}$$

$$\begin{aligned} 12) \quad -4x - 9y &= 19 \\ -7x + 2y &= -20 \end{aligned}$$

13) The water park is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 5 vans and 7 buses with 238 students. High School B rented and filled 8 vans and 8 buses with 304 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.

14) Ted and Matt are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of holiday wrapping paper. Ted sold 11 rolls of plain wrapping paper and 6 rolls of holiday wrapping paper for a total of \$230. Matt sold 14 rolls of plain wrapping paper and 12 rolls of holiday wrapping paper for a total of \$380. Find the cost each of one roll of plain wrapping paper and one roll of holiday wrapping paper.