

Algebra 1 6.3

Solve systems of equations by elimination

system of equations

solve

substitution method

zero pair

additive inverse

addition property of equality

whiteboards

$$x = 1^{\text{st}} \quad y = 2^{\text{nd}} \quad 18$$

5. **CCSS REASONING** The sum of two numbers is 24. Five times the first number minus the second number is 12. What are the two numbers?

$$\begin{cases} x + y = 24 \\ 5x - y = 12 \end{cases}$$

$$\begin{array}{r} 6 + y = 24 \\ -6 \quad -6 \\ \hline y = 18 \end{array}$$

$$\begin{array}{r} 6x = 36 \\ \underline{6} \quad \underline{6} \end{array}$$

$$x = 6$$

Numbers are 6 & 18

$$5 \cdot 6 - 18 = 12$$

$$\therefore 30 - 18 = 12$$

Whiteboards

2. $8x + 5y = 38$
 $-8x + 2y = 4$

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1. $5m - p = 7$
 $7m - p = 11$

8. $y + z = 4$

$$y - z = 8$$

1. $5m - p = 7$
 $7m - p = 11$

3 $7f + 3g = -6$
 $7f - 2g = -31$

4. $6a - 3b = 27$

$$2a - 3b = 11$$

