



Math worksheet on 'Linear Equation Systems - Simple Addition (Level 2)'. Part of a broader unit on 'Algebra Systems of Equations - Intro'

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**1** Solve for the variable by adding or subtracting multiples of the second equation to the first

$$\begin{aligned} 8z + 5m &= 81 \\ -4z + 2m &= -18 \\ m &= ? \end{aligned}$$

**a**  $m = 8$  **b**  $m = 9$

**c**  $m = 4$  **d**  $m = 45$

**e**  $m = -18$  **f**  $m = 5$

**2** Solve for the variable by adding or subtracting multiples of the second equation to the first

$$\begin{aligned} 4y + 10b &= 114 \\ 2y - 5b &= -33 \\ y &= ? \end{aligned}$$

**a**  $y = 48$  **b**  $y = 6$  **c**  $y = 9$

**d**  $y = -33$  **e**  $y = 5$  **f**  $y = 8$

**3** Solve for the variable by adding or subtracting multiples of the second equation to the first

$$\begin{aligned} 6c + 3r &= 66 \\ -2c + 4r &= 18 \\ r &= ? \end{aligned}$$

**a**  $r = 8$  **b**  $r = 18$  **c**  $r = 11$

**d**  $r = 120$  **e**  $r = 15$  **f**  $r = 7$

**4** Solve for the variable by adding or subtracting multiples of the second equation to the first

$$\begin{aligned} 6r + 2m &= 32 \\ -2r + 4m &= 22 \\ m &= ? \end{aligned}$$

**a**  $m = 14$  **b**  $m = 98$  **c**  $m = 22$

**d**  $m = 7$  **e**  $m = 6$  **f**  $m = 10$

**5** Solve for the variable by adding or subtracting multiples of the second equation to the first

$$\begin{aligned} 4n + 4p &= 32 \\ -2n + 2p &= -4 \\ p &= ? \end{aligned}$$

**a**  $p = 3$  **b**  $p = 8$  **c**  $p = -4$

**d**  $p = 6$  **e**  $p = 2$  **f**  $p = 24$

**6** Solve for the variable by adding or subtracting multiples of the second equation to the first

$$\begin{aligned} 12m + 12x &= 108 \\ 2m - 6x &= -38 \\ m &= ? \end{aligned}$$

**a**  $m = 16$  **b**  $m = 2$

**c**  $m = 32$  **d**  $m = 1$

**e**  $m = 5$  **f**  $m = -38$

**7** Solve for the variable by adding or subtracting multiples of the second equation to the first

$$\begin{aligned} 10x + 10y &= 140 \\ 2x - 5y &= -7 \\ x &= ? \end{aligned}$$

**a**  $x = 12$  **b**  $x = -7$  **c**  $x = 8$

**d**  $x = 9$  **e**  $x = 126$  **f**  $x = 14$