



Math worksheet on 'Linear Equation Systems - Simple Variable Substitution (Level 3)'. Part of a broader unit on 'Algebra Systems of Equations - Intro'

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**2** Solve for the variable by substituting the second equation into the first

<b>a</b>	<b>b</b>	<b>c</b>
$r = 4$	$r = 7$	$r = 5$
<b>d</b>	<b>e</b>	<b>f</b>
$r = 8$	$r = 3$	$r = 6$

$$n = 11r + 8$$

$$n = 12r + 3$$

$$r = ?$$

**1** Solve for the variable by substituting the second equation into the first

<b>a</b>	<b>b</b>	<b>c</b>
$m = 4$	$m = 7$	$m = 8$
<b>d</b>	<b>e</b>	<b>f</b>
$m = 9$	$m = 5$	$m = 6$

$$n = 9m - 3$$

$$n = 5m + 21$$

$$m = ?$$

**3** Solve for the variable by substituting the second equation into the first

<b>a</b>	<b>b</b>	<b>c</b>
$n = 8$	$n = 9$	$n = 5$
<b>d</b>	<b>e</b>	<b>f</b>
$n = 7$	$n = 4$	$n = 6$

$$p = 5n + 11$$

$$p = 2n + 29$$

$$n = ?$$

**4** Solve for the variable by substituting the second equation into the first

<b>a</b>	<b>b</b>	<b>c</b>
$p = 6$	$p = 4$	$p = 2$
<b>d</b>	<b>e</b>	<b>f</b>
$p = 7$	$p = 3$	$p = 5$

$$x = 10p + 5$$

$$x = 9p + 9$$

$$p = ?$$

**5** Solve for the variable by substituting the second equation into the first

<b>a</b>	<b>b</b>	<b>c</b>
$n = 1$	$n = 3$	$n = 2$
<b>d</b>	<b>e</b>	<b>f</b>
$n = 4$	$n = 6$	$n = 5$

$$c = 10n - 3$$

$$c = 2n + 21$$

$$n = ?$$

**6** Solve for the variable by substituting the second equation into the first

<b>a</b>	<b>b</b>	<b>c</b>
$y = 7$	$y = 5$	$y = 9$
<b>d</b>	<b>e</b>	<b>f</b>
$y = 8$	$y = 10$	$y = 6$

$$b = 10y - 9$$

$$b = 7y + 12$$

$$y = ?$$

**7** Solve for the variable by substituting the second equation into the first

<b>a</b>	<b>b</b>	<b>c</b>
$d = 11$	$d = 9$	$d = 10$
<b>d</b>	<b>e</b>	<b>f</b>
$d = 12$	$d = 8$	$d = 7$

$$n = 12d - 9$$

$$n = 6d + 45$$

$$d = ?$$