



Math worksheet on 'Linear Equation Systems - Simple Variable Substitution To Equation (Level 1)'.  
Part of a broader unit on 'Algebra Systems of Equations - Intro'

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**1** Substitute the second variable equation into the first equation to form a single solvable equation

$$3x + c = 25$$

$$c = 2x$$

$$x = ?$$

<b>a</b>	<b>b</b>
$3x + 2x = 25$	$3x + 2 = 25$
<b>c</b>	<b>d</b>
$3x + 7x = 25$	$8x + 2 = x$
<b>e</b>	<b>f</b>
$3x - 7x = 25$	$3x + 6x = 25$

**2** Substitute the second variable equation into the first equation to form a single solvable equation

$$4b - r = 9$$

$$r = 3b$$

$$b = ?$$

<b>a</b>	<b>b</b>
$4b - 3b = 9$	$4b + 3 = 9$
<b>c</b>	<b>d</b>
$4b + 3b = 9$	$12b + 3 = b$
<b>e</b>	<b>f</b>
$4b + 11b = 9$	$4b - 11b = 9$

**3** Substitute the second variable equation into the first equation to form a single solvable equation

$$10r + m = 42$$

$$m = 11r$$

$$r = ?$$

<b>a</b>	<b>b</b>
$10r + 3r = 42$	$10r - 4r = 42$
<b>c</b>	<b>d</b>
$10r + 4r = 42$	$5r + 11 = r$
<b>e</b>	<b>f</b>
$10r + 11r = 42$	$10r + 11 = 42$

**4** Substitute the second variable equation into the first equation to form a single solvable equation

$$6r + d = 40$$

$$d = 2r$$

$$r = ?$$

<b>a</b>	<b>b</b>
$6r + 7r = 40$	$6r - 7r = 40$
<b>c</b>	<b>d</b>
$6r + 6r = 40$	$6r + 2r = 40$
<b>e</b>	<b>f</b>
$6r + 2 = 40$	$8r + 2 = r$

**5** Substitute the second variable equation into the first equation to form a single solvable equation

$$12n + b = 80$$

$$b = 8n$$

$$n = ?$$

<b>a</b>	<b>b</b>
$12n + 5n = 80$	$12n + 8n = 80$
<b>c</b>	<b>d</b>
$12n + 6n = 80$	$7n + 8 = n$
<b>e</b>	<b>f</b>
$12n + 8 = 80$	$12n - 6n = 80$

**6** Substitute the second variable equation into the first equation to form a single solvable equation

$$3p + y = 44$$

$$y = 8p$$

$$p = ?$$

<b>a</b>	<b>b</b>
$3p + 5p = 44$	$3p + 8 = 44$
<b>c</b>	<b>d</b>
$7p + 8 = p$	$3p + 8p = 44$
<b>e</b>	<b>f</b>
$3p + 6p = 44$	$3p - 6p = 44$

**7** Substitute the second variable equation into the first equation to form a single solvable equation

$$11x + y = 144$$

$$y = 5x$$

$$x = ?$$

<b>a</b>	$11x + 10x = 144$
<b>b</b>	$11x + 5x = 144$
<b>c</b>	$11x + 5 = 144$
<b>d</b>	$11x - 11x = 144$
<b>e</b>	$11x + 11x = 144$
<b>f</b>	$12x + 5 = x$