Name

Linear Equation Systems - Simple Variable Substitution To Equation

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

$$3p + y = 90$$
$$y = 7p$$
$$p = ?$$

A	B
$3p - 11p = 90$	$12p + 7 = p$
C	**D**
$3p + 11p = 90$	$3p + 10p = 90$
E	**F**
$3p + 7 = 90$	$3p + 7p = 90$

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

$$10y - z = 24$$
$$z = 7y$$
$$y = ?$$

A	B
$10y - 7y = 24$	$10y - 10y = 24$
C	**D**
$10y + 7y = 24$	$10y + 10y = 24$
E	**F**
$10y + 7 = 24$	$11y + 7 = y$

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

$$8p + y = 70$$
$$y = 2p$$
$$p = ?$$

A	B
$8p - 9p = 70$	$8p + 2 = 70$
C	**D**
$8p + 8p = 70$	$8p + 9p = 70$
E	**F**
$10p + 2 = p$	$8p + 2p = 70$

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

$$10m - c = 30$$
$$c = 4m$$
$$m = ?$$

A	B
$10m + 7m = 30$	$10m + 4m = 30$
C	**D**
$10m - 7m = 30$	$10m - 4m = 30$
E	**F**
$10m + 4 = 30$	$8m + 4 = m$

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

$$4b - r = 9$$
$$r = 3b$$
$$b = ?$$

A	B
$4b - 3b = 9$	$12b + 3 = b$
C	**D**
$4b + 3 = 9$	$4b + 11b = 9$
E	**F**
$4b - 11b = 9$	$4b + 3b = 9$

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

$$10r + m = 42$$
$$m = 11r$$
$$r = ?$$

A	B
$5r + 11 = r$	$10r + 4r = 42$
C	**D**
$10r + 3r = 42$	$10r + 11r = 42$
E	**F**
$10r + 11 = 42$	$10r - 4r = 42$

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

$$6z + b = 36$$
$$b = 12z$$
$$z = ?$$

A	B
$6z + 3z = 36$	$6z + 12 = 36$
C	**D**
$6z + 12z = 36$	$5z + 12 = z$
E	**F**
$6z - 4z = 36$	$6z + 4z = 36$

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

$$5m + x = 63$$
$$x = 4m$$
$$m = ?$$

A	B
$10m + 4 = m$	$5m + 9m = 63$
C	**D**
$5m - 9m = 63$	$5m + 4 = 63$
E	**F**
$5m + 4m = 63$	$5m + 8m = 63$