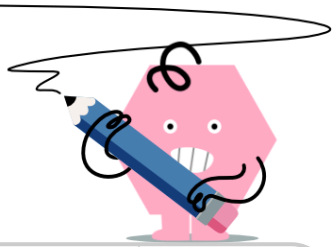
Name

Linear Equation Systems - Simple Variable Substitution To Equation



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

$$8x + 8z = 96$$
$$z = 5x$$
$$x = ?$$

A	B
$8x + 40x = 96$	$8x - 4x = 96$
C	D
$8x + 4x = 96$	$5x + 5 = x$
E	F
$8x + 5 = 96$	$8x - 5x = 96$

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

$$2n + 12c = 100$$
$$c = 4n$$
$$n = ?$$

A	B
$2n + 48n = 100$	$2n + 4n = 100$
C	D
$2n + 4 = 100$	$2n - 5n = 100$
E	F
$5n + 4 = n$	$2n - 4n = 100$

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

$$6y + 5c = 112$$
$$c = 10y$$
$$y = ?$$

A	B
$6y + 50y = 112$	$6y + 10 = 112$
C	D
$6y - 4y = 112$	$5y + 10 = y$
E	F
$6y + 4y = 112$	$6y - 5y = 112$

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

$$7d + 3n = 144$$
$$n = 3d$$
$$d = ?$$

A	B
$7d + 11d = 144$	$12d + 3 = d$
C	D
$7d + 9d = 144$	$7d - 11d = 144$
E	F
$7d - 12d = 144$	$7d + 3 = 144$

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

$$8c + 4n = 64$$
$$n = 2c$$
$$c = ?$$

A	B
$8c + 8c = 64$	$8c + 2 = 64$
C	D
$7c + 2 = c$	$8c + 6c = 64$
E	F
$8c - 7c = 64$	$8c - 6c = 64$

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

$$3y + 3p = 96$$
$$p = 7y$$
$$y = ?$$

A	B
$3y - 7y = 96$	$3y + 7 = 96$
C	D
$3y + 21y = 96$	$3y + 6y = 96$
E	F
$7y + 7 = y$	$3y - 6y = 96$

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

$$4x + 10r = 136$$
$$r = 3x$$
$$x = ?$$

A	B
$4x + 3 = 136$	$4x + 30x = 136$
C	D
$4x + 6x = 136$	$4x - 6x = 136$
E	F
$4x - 7x = 136$	$7x + 3 = x$

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

$$3b + 2p = 49$$
$$p = 2b$$
$$b = ?$$

A	B
$3b + 4b = 49$	$3b - 9b = 49$
C	D
$3b + 2 = 49$	$3b + 9b = 49$
E	F
$3b - 10b = 49$	$10b + 2 = b$