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

$$m = 3z + 7$$
$$m = 2z + 13$$
$$z = ?$$

A $3z - 7 = 9z + 13$

B $3z + 7 = 2z + 13$

C $7z + 2 = 13$

D $8z - 7 = 2z + 13$

E $3z - 13 = 2z + 13$

F $8z + 7 = 2z + 13$

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

$$b = 6x - 4$$
$$b = 3x + 5$$
$$x = ?$$

A $6x - 4 = 6x + 5$

B $5x + 4 = 3x + 5$

C $4x + 3 = 5$

D $5x - 4 = 3x + 5$

E $6x - 4 = 3x + 5$

F $6x - 5 = 3x + 5$

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

$$p = 10y - 5$$
$$p = 6y + 11$$
$$y = ?$$

A $10y - 5 = 6y + 11$

B $10y - 11 = 6y + 11$

C $5y + 6 = 11$

D $10y - 5 = 7y + 11$

E $6y - 5 = 6y + 11$

F $6y + 5 = 6y + 11$

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

$$p = 9n + 8$$
$$p = 8n + 15$$
$$n = ?$$

A $9n + 8 = 8n + 15$

B $8n + 8 = 15$

C $9n - 8 = 10n + 15$

D $9n - 15 = 8n + 15$

E $9n - 8 = 8n + 15$

F $9n + 8 = 10n + 15$

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

$$x = 8b - 5$$
$$x = 6b + 3$$
$$b = ?$$

A $6b - 5 = 6b + 3$

B $6b + 5 = 6b + 3$

C $5b + 6 = 3$

D $8b - 5 = 6b + 3$

E $8b - 3 = 6b + 3$

F $8b - 5 = 7b + 3$

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

$$x = 11m + 6$$
$$x = 2m + 33$$
$$m = ?$$

A $11m - 33 = 2m + 33$

B $6m + 2 = 33$

C $11m + 6 = 2m + 33$

D $11m - 6 = 6m + 33$

E $5m - 6 = 2m + 33$

F $5m + 6 = 2m + 33$

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

$$c = 8m + 12$$
$$c = 4m + 36$$
$$m = ?$$

A $8m - 12 = 4m + 36$

B $12m + 4 = 36$

C $8m + 12 = 4m + 36$

D $8m + 12 = 9m + 36$

E $8m - 36 = 4m + 36$

F $8m - 12 = 9m + 36$

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

$$b = 5z + 10$$
$$b = 3z + 22$$
$$z = ?$$

A $5z - 10 = 9z + 22$

B $5z - 22 = 3z + 22$

C $8z + 10 = 3z + 22$

D $10z + 3 = 22$

E $8z - 10 = 3z + 22$

F $5z + 10 = 3z + 22$