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

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

$$70n - 9c = 69$$
$$c = 7n - 3$$
$$n = ?$$

a. $63n - 7n + 4 = 69$
b. $63n - 7n - 4 = 69$
c. $70n - 63n + 27 = 69$
d. $70n + 63n - 27 = 69$
e. $70n - 7n + 5 = 63$
f. $27n - 7n + 3 = 69$

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

$$45n - 12z = 123$$
$$z = 3n - 8$$
$$n = ?$$

a. $36n - 3n - 1 = 123$
b. $45n + 36n - 96 = 123$
c. $45n - 3n + 2 = 36$
d. $45n - 36n + 96 = 123$
e. $36n - 3n + 1 = 123$
f. $96n - 3n + 8 = 123$

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

$$12b - 5z = 59$$
$$z = 2b - 11$$
$$b = ?$$

a. $12b + 10b - 55 = 59$
b. $55b - 2b + 11 = 59$
c. $10b - 2b + 0 = 59$
d. $10b - 2b - 0 = 59$
e. $12b - 10b + 55 = 59$
f. $12b - 2b + 1 = 10$

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

$$47m - 4x = 84$$
$$x = 9m - 10$$
$$m = ?$$

a. $47m - 9m + 3 = 36$
b. $36m - 9m + 2 = 84$
c. $36m - 9m - 2 = 84$
d. $47m + 36m - 40 = 84$
e. $47m - 36m + 40 = 84$
f. $40m - 9m + 10 = 84$

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

$$7x - 2d = 2$$
$$d = 2x + 11$$
$$x = ?$$

a. $22x - 2x + 11 = 2$
b. $7x - 2x + 7 = 4$
c. $7x - 4x - 22 = 2$
d. $4x - 2x - 6 = 2$
e. $4x - 2x + 6 = 2$
f. $7x + 4x - 22 = 2$

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

$$49d - 10n = 114$$
$$n = 4d - 6$$
$$d = ?$$

a. $40d - 4d - 4 = 114$
b. $49d - 4d + 5 = 40$
c. $40d - 4d + 4 = 114$
d. $60d - 4d + 6 = 114$
e. $49d + 40d - 60 = 114$
f. $49d - 40d + 60 = 114$

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

$$12n - 2x = 26$$
$$x = 3n + 2$$
$$n = ?$$

a. $6n - 3n + 3 = 26$
b. $6n - 3n - 3 = 26$
c. $4n - 3n + 2 = 26$
d. $12n + 6n - 4 = 26$
e. $12n - 3n + 4 = 6$
f. $12n - 6n - 4 = 26$

