



Math worksheet on 'Linear Equation Systems - Simple Equation Substitution To Equation (Level 2)'.
Part of a broader unit on 'Algebra Systems of Equations - Intro'

Learn online: app.mobius.academy/math/units/algebra_systems_of_equations_intro/

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

$$5n + 5m = 125$$

$$m = 2n + 4$$

$$n = ?$$

a $10n + 2n + 5 = 125$

b $20n + 2n + 4 = 125$

c $10n - 2n - 5 = 125$

d $5n + 10n + 20 = 125$

e $5n + 10n - 20 = 125$

f $5n + 2n + 6 = 10$

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

$$6m + 5p = 108$$

$$p = 5m + 3$$

$$m = ?$$

a $m + 25m - 15 = 108$

b $25m + 5m + 1 = 108$

c $6m + 5m + 2 = 25$

d $15m + 5m + 3 = 108$

e $25m - 5m - 1 = 108$

f $6m + 25m + 15 = 108$

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

$$5p + 6m = 68$$

$$m = 3p - 4$$

$$p = ?$$

a $24p + 3p + 4 = 68$

b $5p + 18p - 24 = 68$

c $18p - 3p - 2 = 68$

d $5p - 3p + 3 = 18$

e $18p + 3p - 2 = 68$

f $24p - 3p + 4 = 68$

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

$$11n + 10m = 72$$

$$m = 6n - 7$$

$$n = ?$$

a $70n + 6n + 7 = 72$

b $11n + 60n - 70 = 72$

c $60n + 6n - 0 = 72$

d $70n - 6n + 7 = 72$

e $60n - 6n - 0 = 72$

f $11n - 6n + 1 = 60$

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

$$10r + 2c = 136$$

$$c = 2r + 5$$

$$r = ?$$

a $10r + 2r + 8 = 4$

b $10r + 2r + 5 = 136$

c $4r - 2r - 7 = 136$

d $10r + 4r + 10 = 136$

e $10r + 4r - 10 = 136$

f $4r + 2r + 7 = 136$

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

$$4n + 5c = 117$$

$$c = 8n - 3$$

$$n = ?$$

a $15n - 8n + 3 = 117$

b $40n - 8n - 1 = 117$

c $4n + 40n - 15 = 117$

d $4n - 8n + 2 = 40$

e $40n + 8n - 1 = 117$

f $15n + 8n + 3 = 117$

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

$$4b + 3d = 122$$

$$d = 9b - 11$$

$$b = ?$$

a $27b + 9b - 3 = 122$

b $33b - 9b + 11 = 122$

c $4b + 27b - 33 = 122$

d $33b + 9b + 11 = 122$

e $27b - 9b - 3 = 122$

f $4b - 9b + 4 = 27$