

## mobius

## **Linear Equation Systems - Simple Variable Substitution To Equation**



$3p+\stackrel{ ext{a single solvable}}{y=90} \ y=7p \ p=?$	$egin{aligned} 3p+11p&=90 \ & E \ & 3p+7=90 \end{aligned}$	D $3p+10p=90$ F $3p+7p=90$	$10y \overset{ ext{a single solvable}}{z} = 24 \ z = 7y \ y = ?$	$egin{array}{c} { t C} \\ { t 10}y+7y=24 \\ { t E} \\ { t 10}y+7=24 \end{array}$	B $10y-10y=24$ $D$ $10y+10y=24$ $F$ $11y+7=y$
$8p+\overset{ ext{a single solvable}}{y}\overset{ ext{equation}}{=}70$	A $8p-9p=70$ $egin{array}{c} { t C} \\ 8p+8p=70 \end{array}$	D	10m-c=30	С	B $10m+4m=30$ D $10m-4m=30$
p = ?	E $10p+2=p$ A	F $8p+2p=70$ B	m=?	E $10m + 4 = 30$	$oxed{F} 8m+4=m$
variable equation into the first equation to form a single solvable $4b - \frac{equation}{} = 9$	7ab - 3b = 9 $6ab - 3b = 9$ $6ab - 3b = 9$	12b+3=b	variable equation into the first equation to form a single solvable equation $10r+m=42$	5r+11=rC	$egin{array}{c} 10r+4r=42 \ \hline  extstyle{D} \ 10r+11r=42 \ \hline \end{array}$
I - 30	E	F	111 — 111	E	F

$egin{align*} 8p+y=70 &  ag{C} &  ag{D} &  ag{Sp+8p=708p+9p=70} \ y=2p &  ag{E} & $	n-4m=30
$p=$ ? $\begin{vmatrix} 10p+2=p \ 8p+2p=70 \end{vmatrix}$ $m=$ ? $\begin{vmatrix} 10m+4=30 \ 8m \end{vmatrix}$	a+4=m
Substitute the second variable equation into the first equation a single solvable equation a single solvable equation $\mathbf{A}$ A $\mathbf{A}$ $\mathbf{B}$ $\mathbf{A}$ $\mathbf{A}$ $\mathbf{B}$ $\mathbf{A}$ $\mathbf{A}$ $\mathbf{B}$ $\mathbf{A}$ $\mathbf{A}$ $\mathbf{B}$ $\mathbf{B}$ $\mathbf{A}$ $\mathbf{B}$	r+4r=42
$egin{array}{c} 4b-\overset{ ext{equation}}{r=3b} & \overset{ ext{c}}{\downarrow_{b+3=9}} & 10r+\overset{ ext{equation}}{m=11r} & \overset{ ext{c}}{\downarrow_{10r+3r=42}} & \overset{ ext{c}}{\downarrow_{10r-3r=42}} & \overset{ ext{c}}{\downarrow$	+ 11 $r=$ 42
b=? $b=$ $b=$ $b=$ $b=$ $b=$ $b=$ $b=$ $b=$	r-4r=42
7 Substitute the second variable equation into the first equation to form a single solvable $\begin{vmatrix} A \\ 6z + 3z = 36 \end{vmatrix}$ B Substitute the second variable equation into the first equation to form a single solvable $\begin{vmatrix} A \\ 10m + 4 = m \end{vmatrix}$ B $\begin{vmatrix} A \\ 10m + 4 = m \end{vmatrix}$	+9m = 63
$egin{align*} 6z+b=36 = 36 &  ext{c} &  ext{$	. + 4 = 63
$z=$ ? $egin{array}{c c} \hline z=2z & \hline z=36 & F & \hline b=2z=36 & \hline z=2z & \hline z=2z$	+8m=63