Name:			



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

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1 Add or subtract multiples of the second equation to the first equation to form a single solvable equation	$egin{aligned} \mathbf{a} \ 18z = 12 \end{aligned}$	$egin{array}{c} \mathbf{b} \ 2z = 18 \end{array}$
$egin{array}{c} 10z + 8d = 130 \ 4z + 4d = 56 \ \end{array}$	$egin{array}{c} \mathbf{c} \ 2z = 130 \end{array}$	$rac{ extsf{d}}{18z}=2$
z = ?	$\overset{ extbf{e}}{2}z=2$	56z = 130

2 Add or subtract multiples of the second equation to the first equation to form a single solvable equation
$$7r=153$$
 and $7r=63$ $7r=63$ and $7r=153$ and $7r=63$ and $7r=153$ and $7r=153$

Add or subtract multiples of the second equation to the first equation to form a single solvable equation		b $-30r = -15$
$egin{array}{c} 12r+9p=69 \ 9r+3p=33 \ \end{array}$	$oldsymbol{c} -15r = -15$	33r=69
r=?	-30r=5	$egin{aligned} \mathbf{f} \ -15r = 69 \end{aligned}$

4 Add or subtract multiples of the second equation to the first equation to form a single solvable equation	a −6 <i>b</i> = 138	b −6 <i>b</i> = −42
$egin{array}{c} 12b + 6m = 138 \ 6b + 2m = 60 \ \end{array}$	$oldsymbol{c}{60}{b}=138$	d $-42b = -6$
b = ?	-6b = -6	$ \begin{array}{c} \mathbf{f} \\ -42b = 10 \end{array} $

5 Add or subtract multiples of the second equation to the first equation to form a single solvable equation		$egin{array}{c} \mathbf{b} \ 26m = 50 \end{array}$
$egin{array}{l} 7m+6r=50 \ 4m+3r=26 \end{array}$	$egin{array}{c} {\sf c} \ { m -2} m = { m -1} \end{array}$	$egin{aligned} extsf{d} \ -1m = -1 \end{aligned}$
m=?	-2m = 5	f $-1m = 50$

6 Add or subtract multiples of the second equation to the first equation to form a single solvable equation	a $-48r=7$	b $-48r = -12$
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	121 — 44	$\begin{array}{c} \mathbf{d} \\ -12r = -48 \end{array}$
r=?	$rac{ extsf{e}}{46r}=44$	

7 Add or subtract multiples of the second equation to the first equation to form a single solvable equation	a $91b=147$	$oldsymbol{b}$ $-5b = 147$
$egin{array}{c} 9b+12d=147\ 7b+6d=91 \end{array}$	$oldsymbol{ ext{c}}{-35b}=10$	$egin{array}{c} extsf{d} \ -5b = -5 \end{array}$
b = ?	e −5 <i>b</i> = −35	-35b = -5