## Linear Systems (F)

Solve each system of equations.

$$
\text { 1. } \begin{aligned}
& -5 v+2 x+3 z=13 \\
& -4 v-3 x=20 \\
& 2 v=-10
\end{aligned}
$$

5. $-3 b+4 x-6 y=-21$

$$
-b+5 x=3
$$

$$
3 b=-9
$$

6. $3 c-6 y+6 z=-18$
$-4 c-4 y=36$
$-6 c=24$

$$
\text { 3. } \begin{aligned}
& 4 c-6 u-2 x=14 \\
& -4 c+6 u=-16 \\
& -2 c=-2
\end{aligned}
$$

4. $-4 c+3 v+6 z=10$ $4 c-5 v=30$ $c=5$

$$
\text { 7. } \begin{aligned}
& -3 b+6 v-5 y=76 \\
& -2 b-4 v=-14 \\
& 2 b=-10
\end{aligned}
$$

8. $-2 c-2 v-4 z=-12$
$4 c-6 v=14$
$5 c=-5$

## Linear Systems (F) Answers

Solve each system of equations.

$$
\text { 1. } \begin{aligned}
& -5 v+2 x+3 z=13 \\
& -4 v-3 x=20 \\
& 2 v=-10 \\
& v=-5, x=0, z=-4
\end{aligned}
$$

5. $-3 b+4 x-6 y=-21$
$-b+5 x=3$
$3 b=-9$
$b=-3, x=0, y=5$
6. $-a-b-3 u=6$
$5 a+b=-10$
$2 a=-2$
$a=-1, b=-5, u=0$
7. $3 c-6 y+6 z=-18$
$-4 c-4 y=36$
$-6 c=24$
$c=-4, y=-5, z=-6$
8. $4 c-6 u-2 x=14$
$-4 c+6 u=-16$
$-2 c=-2$
$c=1, u=-2, x=1$
9. $-3 b+6 v-5 y=76$
$-2 b-4 v=-14$ $2 b=-10$
$b=-5, v=6, y=-5$

$$
\text { 4. } \begin{aligned}
& -4 c+3 v+6 z=10 \\
& 4 c-5 v=30 \\
& c=5 \\
& c=5, v=-2, z=6
\end{aligned}
$$

8. $\begin{aligned} & -2 c-2 v-4 z=-12 \\ & 4 c-6 v=14\end{aligned}$ $5 c=-5$
$c=-1, v=-3, z=5$
