## Linear Systems (A)

Solve each system of equations.

1. $-6 v-6 y=66$
$2 v+4 y=-32$
2. $2 y-6 z=-30$
$-y-z=-1$
3. $\begin{aligned} & 3 a-3 x=-3 \\ & -5 a+x=-3\end{aligned}$
$-5 a+x=-3$
4. $-5 a+c=-30$
$4 a-5 c=24$
5. $\begin{gathered}5 a-v=-23 \\ -a+v=3\end{gathered}$
6. $\begin{array}{r}-3 v+3 x=12 \\ 3 v-6 x=-21\end{array}$
7. $-6 a-5 v=46$ $-6 a-4 v=44$
8. $\begin{gathered}-3 v-3 x=15 \\ 5 v+x=-29\end{gathered}$

## Linear Systems (A) Answers

Solve each system of equations.

1. $-6 v-6 y=66$
$2 v+4 y=-32$
$v=-6, y=-5$
2. $2 y-6 z=-30$
$-y-z=-1$
$y=-3, z=4$
3. $3 a-3 x=-3$
$-5 a+x=-3$
$a=1, x=2$
4. $-5 a+c=-30$
$4 a-5 c=24$
$a=6, c=0$
5. $5 a-v=-23$
$-a+v=3$
$a=-5, v=-2$
6. $-3 v+3 x=12$
$3 v-6 x=-21$
$v=-1, x=3$

$$
\text { 4. } \begin{aligned}
-6 a-5 v & =46 \\
-6 a-4 v & =44 \\
a=-6, v & =-2
\end{aligned}
$$

8. $-3 v-3 x=15$
$5 v+x=-29$
$v=-6, x=1$

## Linear Systems (B)

## Solve each system of equations.

1. $-a-z=4$
$-3 a+3 z=24$
2. $-5 x+6 z=37$ $5 x+4 z=-17$
3. $\begin{gathered}-a+5 v=18 \\ 5 a+6 v=3\end{gathered}$
$5 a+6 v=3$
4. $-2 a+5 z=-32$
$-5 a-6 z=-6$

$$
-5 a-6 z=-6
$$

$$
\text { 3. } \begin{aligned}
& 4 u-2 v=26 \\
& -2 u-4 v=12
\end{aligned}
$$

6. $5 a-z=-8$
$-2 a+5 z=-6$
7. $a-2 c=-8$
$-a+5 c=17$
8. $\begin{aligned} & -5 x+4 y=23 \\ & 2 x+6 y=6\end{aligned}$

## Linear Systems (B) Answers

Solve each system of equations.

1. $-a-z=4$
$-3 a+3 z=24$
$a=-6, z=2$
2. $-5 x+6 z=37$
$5 x+4 z=-17$
$x=-5, z=2$
3. $-a+5 v=18$
$5 a+6 v=3$
$a=-3, v=3$
4. $5 a-z=-8$
$-2 a+5 z=-6$
$a=-2, z=-2$

$$
\text { 3. } \begin{aligned}
& 4 u-2 v=26 \\
& -2 u-4 v=12 \\
& u=4, v=-5
\end{aligned}
$$

7. $a-2 c=-8$
$-a+5 c=17$
$a=-2, c=3$

$$
\text { 4. } \begin{gathered}
-2 a+5 z=-32 \\
-5 a-6 z=-6 \\
a=6, z=-4
\end{gathered}
$$

8. $-5 x+4 y=23$
$2 x+6 y=6$
$x=-3, y=2$

## Linear Systems (C)

Solve each system of equations.

1. $4 b-u=3$
$-3 b+u=-3$
2. $\begin{array}{r}5 c+2 z=-25 \\ -4 c-4 z=20\end{array}$
3. $-6 c-2 u=-6$
$-5 c-6 u=-18$
4. $-3 a+b=-15$
$2 a+4 b=10$
5. $2 x+6 z=40$
$4 x-4 z=0$
6. $\begin{array}{r}2 b-2 v=-6 \\ -2 b+4 v=2\end{array}$
7. $-6 c+6 y=6$
$4 c+6 y=-24$
8. $3 u+2 y=4$
$2 u+3 y=11$

## Linear Systems (C) Answers

Solve each system of equations.

1. $4 b-u=3$
$-3 b+u=-3$
$b=0, u=-3$
2. $5 c+2 z=-25$
$-4 c-4 z=20$
$c=-5, z=0$
3. $-6 c-2 u=-6$
$-5 c-6 u=-18$
$c=0, u=3$
4. $-3 a+b=-15$
$2 a+4 b=10$ $a=5, b=0$
5. $2 x+6 z=40$
$4 x-4 z=0$
$x=5, z=5$
6. $2 b-2 v=-6$
$-2 b+4 v=2$
$b=-5, v=-2$
7. $-6 c+6 y=6$
$4 c+6 y=-24$
$c=-3, y=-2$
8. $3 u+2 y=4$
$2 u+3 y=11$
$u=-2, y=5$

## Linear Systems (D)

Solve each system of equations.

1. $-5 u+2 x=22$
2. $6 u-2 v=18$
$5 u-4 v=8$
3. $\begin{aligned} & 3 a+4 c=-19 \\ & 5 a+2 c=-13\end{aligned}$
4. $5 v-4 x=34$
$6 v-2 x=24$
5. $-3 b-u=-12$
$-b+2 u=-4$
6. $2 a-4 u=10$
$3 a+u=-6$
7. $-2 u+6 x=0$
$-4 u+3 x=9$
8. $6 a-5 v=-49$
$-4 a-6 v=-14$

## Linear Systems (D) Answers

Solve each system of equations.

1. $-5 u+2 x=22$
$-u-6 x=-34$
$u=-2, x=6$
2. $6 u-2 v=18$
$5 u-4 v=8$
$u=4, v=3$
3. $3 a+4 c=-19$
$5 a+2 c=-13$
$a=-1, c=-4$
4. $5 v-4 x=34$
$6 v-2 x=24$
$v=2, x=-6$
5. $-3 b-u=-12$
$-b+2 u=-4$
$b=4, u=0$
6. $2 a-4 u=10$
$3 a+u=-6$
$a=-1, u=-3$
7. $-2 u+6 x=0$
$-4 u+3 x=9$
$u=-3, x=-1$
8. $6 a-5 v=-49$
$-4 a-6 v=-14$
$a=-4, v=5$

## Linear Systems (E)

Solve each system of equations.

1. $\begin{aligned} & -5 a-4 c=-4 \\ & 2 a-c=-14\end{aligned}$
2. $\begin{aligned} & -2 u+3 x=4 \\ & -4 u-x=-6\end{aligned}$
3. $\begin{aligned} 3 b-2 u & =-6 \\ 6 b+4 u & =-60\end{aligned}$
4. $6 v+3 x=21$
$6 v-x=33$
5. $\begin{aligned} & b-4 z=-25 \\ & 4 b-2 z=-30\end{aligned}$
6. $\begin{gathered}5 u-4 y=-38 \\ -3 u-y=16\end{gathered}$
7. $-4 a-2 x=22$

## Linear Systems (E) Answers

Solve each system of equations.

1. $-5 a-4 c=-4$
$2 a-c=-14$
$a=-4, c=6$
2. $-2 u+3 x=4$
$-4 u-x=-6$
$u=1, x=2$
3. $3 b-2 u=-6$
$6 b+4 u=-60$
$b=-6, u=-6$
4. $-2 u+4 v=-12$
$-2 u-4 v=-4$ $u=4, v=-1$
5. $6 v+3 x=21$
$6 v-x=33$
$v=5, x=-3$
6. $b-4 z=-25$ $4 b-2 z=-30$
$b=-5, z=5$
7. $5 u-4 y=-38$
$-3 u-y=16$
$u=-6, y=2$
8. $-4 a-2 x=22$
$a+6 x=0$
$a=-6, x=1$

## Linear Systems (F)

Solve each system of equations.

1. $6 v+3 z=-6$
$6 v-6 z=-24$
2. $6 x+2 z=-2$
$x+2 z=3$
3. $-6 b+4 v=-32$ $2 b-4 v=16$
4. $\begin{aligned} & 5 a-4 u=-12 \\ & 2 a-u=-3\end{aligned}$
5. $\begin{aligned} & -2 a+3 u=4 \\ & 2 a+2 u=6\end{aligned}$
6. $-2 y+5 z=-24$
7. $2 a+4 u=0$
$-y+4 z=-18$

$$
-3 a+5 u=11
$$

## Linear Systems (F) Answers

Solve each system of equations.

1. $6 v+3 z=-6$
$6 v-6 z=-24$
$v=-2, z=2$
2. $6 x+2 z=-2$
$x+2 z=3$
$x=-1, z=2$
3. $-6 b+4 v=-32$
$2 b-4 v=16$ $b=4, v=-2$
4. $-5 v+5 y=40$
$-2 v+6 y=40$
$v=-2, y=6$
5. $5 a-4 u=-12$
$2 a-u=-3$
$a=0, u=3$
6. $\begin{aligned} & -2 a+3 u=4 \\ & 2 a+2 u=6 \\ & a=1, u=2\end{aligned}$

$$
\text { 4. } \begin{gathered}
-2 y+5 z=-24 \\
-y+4 z=-18 \\
y=2, z=-4
\end{gathered}
$$

8. $2 a+4 u=0$ $-3 a+5 u=11$ $a=-2, u=1$

## Linear Systems (G)

Solve each system of equations.

1. $-4 c-5 x=-33$
$3 c-6 x=-24$
2. $4 u-4 x=4$
3. $6 c-2 x=8$
$4 c-3 x=2$
4. $\begin{aligned} 5 a+6 u & =-30 \\ 5 a-6 u & =-30\end{aligned}$
5. $4 v+3 x=19$
$-v+4 x=0$
6. $\begin{aligned} & -3 a-u=7 \\ & 6 a-2 u=2\end{aligned}$
7. $2 a+6 z=-20$
$6 a+2 z=-28$
8. $-2 b-4 c=-18$
$b+6 c=33$

## Linear Systems (G) Answers

Solve each system of equations.

1. $-4 c-5 x=-33$
$3 c-6 x=-24$
$c=2, x=5$
2. $4 u-4 x=4$
$u+6 x=-6$
$u=0, x=-1$
3. $6 c-2 x=8$
$4 c-3 x=2$
$c=2, x=2$
4. $5 a+6 u=-30$
$5 a-6 u=-30$
$a=-6, u=0$

$$
\text { 3. } \begin{gathered}
4 v+3 x=19 \\
-v+4 x=0 \\
v=4, x=1
\end{gathered}
$$

7. $-3 a-u=7$
$6 a-2 u=2$
$a=-1, u=-4$
8. $2 a+6 z=-20$
$6 a+2 z=-28$
$a=-4, z=-2$
9. $-2 b-4 c=-18$
$b+6 c=33$
$b=-3, c=6$

## Linear Systems (H)

Solve each system of equations.

1. $6 v+3 x=0$
$4 v-6 x=-16$
2. $3 c-u=3$
$-3 c-5 u=-39$
3. $\begin{gathered}-2 c-4 u=12 \\ 3 c+u=-13\end{gathered}$

$$
\text { 3. } \begin{aligned}
-2 u+2 x & =20 \\
-5 u+4 x & =44
\end{aligned}
$$

4. $-u-5 x=-13$

$$
3 u+4 x=17
$$

6. $-6 a-6 y=42$ $-6 a+3 y=15$
7. $\begin{aligned} & -2 u-2 z=-18 \\ & -2 u+3 z=2\end{aligned}$
8. $3 a-4 u=-9$
$3 a+u=21$

## Linear Systems (H) Answers

Solve each system of equations.

1. $6 v+3 x=0$
$4 v-6 x=-16$
$v=-1, x=2$
2. $3 c-u=3$
$-3 c-5 u=-39$
$c=3, u=6$

$$
\text { 2. } \begin{aligned}
& -2 c-4 u=12 \\
& 3 c+u=-13 \\
& c=-4, u=-1
\end{aligned}
$$

6. $\begin{aligned}-6 a-6 y & =42 \\ -6 a+3 y & =15 \\ a=-4, y & =-3\end{aligned}$

$$
\text { 3. } \begin{aligned}
-2 u+2 x & =20 \\
-5 u+4 x & =44 \\
u=-4, x & =6
\end{aligned}
$$

7. $-2 u-2 z=-18$
$-2 u+3 z=2$ $u=5, z=4$
8. $-u-5 x=-13$
$3 u+4 x=17$
$u=3, x=2$
9. $3 a-4 u=-9$
$3 a+u=21$
$a=5, u=6$

## Linear Systems (I)

Solve each system of equations.

1. $\begin{aligned} & 2 b-y=15 \\ & -5 b-2 y=-24\end{aligned}$
2. $4 a-2 u=0$ $3 a-6 u=-9$
3. $4 y-4 z=-40$ $-4 y+5 z=45$
4. $\begin{gathered}-3 c-3 y=-9 \\ 5 c-2 y=-27\end{gathered}$
5. $-4 u+v=7$
$6 u-4 v=-18$
6. $c+4 u=-8$
$4 c+2 u=10$
7. $-6 a+z=17$
$6 a-3 z=-27$

## Linear Systems (I) Answers

Solve each system of equations.

1. $2 b-y=15$

$$
\begin{aligned}
& -5 b-2 y=-24 \\
& b=6, y=-3
\end{aligned}
$$

5. $4 a-2 u=0$
$3 a-6 u=-9$
$a=1, u=2$
6. $4 y-4 z=-40$
$-4 y+5 z=45$
$y=-5, z=5$
7. $-3 c-3 y=-9$
$5 c-2 y=-27$
$c=-3, y=6$
8. $-4 u+v=7$
$6 u-4 v=-18$
$u=-1, v=3$
9. $c+4 u=-8$
$4 c+2 u=10$
$c=4, u=-3$
10. $-6 a+z=17$
$6 a-3 z=-27$
$a=-2, z=5$
11. $6 v-3 y=-21$
$-5 v+2 y=15$
$v=-1, y=5$

## Linear Systems (J)

Solve each system of equations.

1. $\begin{aligned} & 6 b+3 x=12 \\ & 2 b-2 x=4\end{aligned}$ $2 b-2 x=4$
2. $-b+u=-5$
$-b-4 u=5$
3. $\begin{gathered}-6 c+5 x=-2 \\ 2 c+5 x=-26\end{gathered}$
4. $\begin{aligned} & -4 a-6 u=6 \\ & a-5 u=18\end{aligned}$
5. $\begin{aligned} & -5 a-z=14 \\ & a+3 z=0\end{aligned}$
6. $3 a+3 x=-6$ $-4 a-2 x=6$

## Linear Systems (J) Answers

Solve each system of equations.

1. $\begin{aligned} 6 b+3 x & =12 \\ 2 b-2 x & =4 \\ b=2, x & =0\end{aligned}$
2. $\begin{gathered}-b+u=-5 \\ -b-4 u=5 \\ b=3, u=-2\end{gathered}$
3. $-2 x+6 y=-12$
$x-y=2$
$x=0, y=-2$
4. $\begin{aligned} & -6 c+5 x=-2 \\ & 2 c+5 x=-26 \\ & c=-3 x=-4\end{aligned}$ $c=-3, x=-4$
5. $-5 a-z=14$ $a+3 z=0$ $a=-3, z=1$
6. $-2 b+z=-6$

$$
-4 b+z=-6
$$

$$
b=0, z=-6
$$

8. $3 a+3 x=-6$
$-4 a-2 x=6$
$a=-1, x=-1$
