Linear Systems (A)

Solve each system of equations.

1. $4x + 6y + 5z = 70$
   $4x + 6y = 60$
   $3x = 18$

2. $4u + 3v + 2y = 44$
   $3u + 4v = 36$
   $3u = 12$

3. $3b + c + 3u = 22$
   $3b + 6c = 12$
   $5b = 10$

4. $2v + 4x + 2z = 24$
   $4v + x = 16$
   $6v = 18$

5. $b + 2u + 3y = 24$
   $5b + 2u = 13$
   $2b = 2$

6. $a + 3v + 4y = 36$
   $a + 3v = 24$
   $4a = 24$

7. $2b + 5v + 4x = 44$
   $3b + 4v = 33$
   $5b = 15$

8. $4a + b + 3v = 31$
   $4a + b = 25$
   $5a = 30$

Linear Systems (A) Answers

Solve each system of equations.

1. $4x+6y+5z=70$
   $4x+6y=60$
   $3x=18$
   $x=6, y=6, z=2$

2. $4u+3v+2y=44$
   $3u+4v=36$
   $3u=12$
   $u=4, v=6, y=5$

3. $3b+c+3u=22$
   $3b+6c=12$
   $5b=10$
   $b=2, c=1, u=5$

4. $2v+4x+2z=24$
   $4v+x=16$
   $6v=18$
   $v=3, x=4, z=1$

5. $b+2u+3y=24$
   $5b+2u=13$
   $2b=2$
   $b=1, u=4, y=5$

6. $a+3v+4y=36$
   $a+3v=24$
   $4a=24$
   $a=6, v=6, y=3$

7. $2b+5v+4x=44$
   $3b+4v=33$
   $5b=15$
   $b=3, v=6, x=2$

8. $4a+b+3v=31$
   $4a+b=25$
   $5a=30$
   $a=6, b=1, v=2$

Linear Systems (B)

Solve each system of equations.

1. $3a + 5u + 3x = 42$
   $5a + 6u = 48$
   $4a = 24$

2. $5a + 4c + z = 49$
   $4a + 6c = 48$
   $4a = 24$

3. $3c + 4v + 2y = 34$
   $5c + 4v = 42$
   $5c = 30$

4. $2b + 2v + 2z = 22$
   $6b + 5v = 37$
   $2b = 4$

5. $v + 3x + 6y = 51$
   $5v + 6x = 51$
   $2v = 6$

6. $2b + 6c + x = 46$
   $5b + 3c = 28$
   $b = 2$

7. $5a + 5b + 3z = 73$
   $a + 2b = 17$
   $2a = 10$

8. $3a + 6u + 3y = 51$
   $6a + 5u = 56$
   $6a = 36$

Linear Systems (B) Answers

Solve each system of equations.

1. $3a+5u+3x=42$
   $5a+6u=48$
   $4a=24$
   $a=6, u=3, x=3$

2. $5a+4c+z=49$
   $4a+6c=48$
   $4a=24$
   $a=6, c=4, z=3$

3. $3c+4v+2y=34$
   $5c+4v=42$
   $5c=30$
   $c=6, v=3, y=2$

4. $2b+2v+2z=22$
   $6b+5v=37$
   $2b=4$
   $b=2, v=5, z=4$

5. $v+3x+6y=51$
   $5v+6x=51$
   $2v=6$
   $v=3, x=6, y=5$

6. $2b+6c+x=46$
   $5b+3c=28$
   $b=2$
   $b=2, c=6, x=6$

7. $5a+5b+3z=73$
   $a+2b=17$
   $2a=10$
   $a=5, b=6, z=6$

8. $3a+6u+3y=51$
   $6a+5u=56$
   $6a=36$
   $a=6, u=4, y=3$

Linear Systems (C)

Solve each system of equations.

1. $6u + 3y + 2z = 31$
   $4u + 3y = 15$
   $3u = 9$

2. $a + x + 4z = 12$
   $2a + 6x = 28$
   $2a = 10$

3. $5c + 2y + 6z = 49$
   $2c + 6y = 18$
   $5c = 15$

4. $2b + 5c + 2z = 28$
   $3b + 2c = 17$
   $b = 3$

5. $2a + 6c + 6z = 68$
   $5a + 5c = 40$
   $6a = 24$

6. $a + 2b + 2x = 8$
   $3a + 5b = 17$
   $4a = 16$

7. $2c + 3v + 3x = 32$
   $2c + 4v = 24$
   $3c = 12$

8. $4b + 4y + 3z = 23$
   $5b + 6y = 11$
   $2b = 2$

Linear Systems (C) Answers

Solve each system of equations.

1. $6u+3y+2z=31$
   $4u+3y=15$
   $3u=9$
   $u=3, y=1, z=5$

2. $a+x+4z=12$
   $2a+6x=28$
   $2a=10$
   $a=5, x=3, z=1$

3. $5c+2y+6z=49$
   $2c+6y=18$
   $5c=15$
   $c=3, y=2, z=5$

4. $2b+5c+2z=28$
   $3b+2c=17$
   $b=3$
   $b=3, c=4, z=1$

5. $2a+6c+6z=68$
   $5a+5c=40$
   $6a=24$
   $a=4, c=4, z=6$

6. $a+2b+2x=8$
   $3a+5b=17$
   $4a=16$
   $a=4, b=1, x=1$

7. $2c+3v+3x=32$
   $2c+4v=24$
   $3c=12$
   $c=4, v=4, x=4$

8. $4b+4y+3z=23$
   $5b+6y=11$
   $2b=2$
   $b=1, y=1, z=5$

Linear Systems (D)

Solve each system of equations.

1. $6a + 3y + 5z = 50$
   $5a + 3y = 26$
   $6a = 24$

2. $5b + u + 4v = 35$
   $b + 4u = 10$
   $b = 6$

3. $4a + 3x + z = 24$
   $6a + 4x = 30$
   $4a = 4$

4. $2b + 6u + 3v = 41$
   $3b + 3u = 21$
   $6b = 6$

5. $4c + 2u + y = 13$
   $6c + 2u = 12$
   $3c = 3$

6. $5u + 5y + 2z = 37$
   $3u + 5y = 23$
   $u = 6$

7. $6v + 3y + 2z = 33$
   $3v + 2y = 16$
   $5v = 10$

8. $c + 2v + 4x = 31$
   $4c + v = 23$
   $6c = 30$

Linear Systems (D) Answers

Solve each system of equations.

1. $6a+3y+5z=50$
   $5a+3y=26$
   $6a=24$
   $a=4, y=2, z=4$

2. $5b+u+4v=35$
   $b+4u=10$
   $b=6$
   $b=6, u=1, v=1$

3. $4a+3x+z=24$
   $6a+4x=30$
   $4a=4$
   $a=1, x=6, z=2$

4. $2b+6u+3v=41$
   $3b+3u=21$
   $6b=6$
   $b=1, u=6, v=1$

5. $4c+2u+y=13$
   $6c+2u=12$
   $3c=3$
   $c=1, u=3, y=3$

6. $5u+5y+2z=37$
   $3u+5y=23$
   $u=6$
   $u=6, y=1, z=1$

7. $6v+3y+2z=33$
   $3v+2y=16$
   $5v=10$
   $v=2, y=5, z=3$

8. $c+2v+4x=31$
   $4c+v=23$
   $6c=30$
   $c=5, v=3, x=5$

Linear Systems (E)

Solve each system of equations.

1. $b+4c+u=24$
   $5b+6c=54$
   $2b=12$

2. $c+4u+5v=26$
   $4c+3u=18$
   $3c=9$

3. $2c+2v+5z=19$
   $3c+6v=24$
   $5c=30$

4. $6b+6c+6u=72$
   $3b+4c=30$
   $2b=12$

5. $2c+5v+5x=60$
   $4c+3v=32$
   $2c=10$

6. $5v+3y+4z=31$
   $v+6y=20$
   $6v=12$

7. $4a+4b+5v=32$
   $4a+6b=16$
   $6a=6$

8. $c+2v+x=18$
   $6c+6v=54$
   $2c=8$

Linear Systems (E) Answers

Solve each system of equations.

1. $b+4c+u=24$
   $5b+6c=54$
   $2b=12$
   $b=6, c=4, u=2$

2. $c+4u+5v=26$
   $4c+3u=18$
   $3c=9$
   $c=3, u=2, v=3$

3. $2c+2v+5z=19$
   $3c+6v=24$
   $5c=30$
   $c=6, v=1, z=1$

4. $6b+6c+6u=72$
   $3b+4c=30$
   $2b=12$
   $b=6, c=3, u=3$

5. $2c+5v+5x=60$
   $4c+3v=32$
   $2c=10$
   $c=5, v=4, x=6$

6. $5v+3y+4z=31$
   $v+6y=20$
   $6v=12$
   $v=2, y=3, z=3$

7. $4a+4b+5v=32$
   $4a+6b=16$
   $6a=6$
   $a=1, b=2, v=4$

8. $c+2v+x=18$
   $6c+6v=54$
   $2c=8$
   $c=4, v=5, x=4$

Linear Systems (F)

Solve each system of equations.

1. $3a + 4u + z = 35$
   $4a + 4u = 40$
   $a = 6$

2. $2u + 4x + 5y = 49$
   $2u + 5x = 27$
   $u = 6$

3. $4a + c + 6z = 32$
   $6a + 6c = 48$
   $a = 4$

4. $2a + 3b + z = 27$
   $5a + b = 16$
   $5a = 10$

5. $4b + 2c + 3x = 32$
   $2b + 4c = 16$
   $4b = 16$

6. $2a + 2b + 5x = 17$
   $6a + 3b = 30$
   $2a = 8$

7. $6u + v + 2y = 19$
   $5u + 2v = 16$
   $5u = 10$

8. $5b + 3c + v = 33$
   $6b + 5c = 40$
   $4b = 20$

Linear Systems (F) Answers

Solve each system of equations.

1. $3a+4u+z=35$
   $4a+4u=40$
   $a=6$
   $a=6, u=4, z=1$

2. $2u+4x+5y=49$
   $2u+5x=27$
   $u=6$
   $u=6, x=3, y=5$

3. $4a+c+6z=32$
   $6a+6c=48$
   $a=4$
   $a=4, c=4, z=2$

4. $2a+3b+z=27$
   $5a+b=16$
   $5a=10$
   $a=2, b=6, z=5$

5. $4b+2c+3x=32$
   $2b+4c=16$
   $4b=16$
   $b=4, c=2, x=4$

6. $2a+2b+5x=17$
   $6a+3b=30$
   $2a=8$
   $a=4, b=2, x=1$

7. $6u+v+2y=19$
   $5u+2v=16$
   $5u=10$
   $u=2, v=3, y=2$

8. $5b+3c+v=33$
   $6b+5c=40$
   $4b=20$
   $b=5, c=2, v=2$

Linear Systems (G)

Solve each system of equations.

1. $b+4c+4y=33$
   $5b+5c=40$
   $2b=10$

2. $4u+6v+6y=54$
   $3u+5v=38$
   $3u=18$

3. $4c+6v+5x=74$
   $4c+4v=44$
   $2c=12$

4. $3x+4y+2z=44$
   $x+2y=16$
   $5x=30$

5. $5b+2u+6v=44$
   $3b+u=18$
   $3b=12$

6. $5a+4b+2v=28$
   $2a+2b=8$
   $5a=10$

7. $3v+6y+6z=72$
   $6v+y=30$
   $5v=20$

8. $4v+4x+2y=28$
   $2v+4x=16$
   $4v=16$

Linear Systems (G) Answers

Solve each system of equations.

1. $b+4c+4y=33$
   $5b+5c=40$
   $2b=10$
   $b=5, c=3, y=4$

2. $4u+6v+6y=54$
   $3u+5v=38$
   $3u=18$
   $u=6, v=4, y=1$

3. $4c+6v+5x=74$
   $4c+4v=44$
   $2c=12$
   $c=6, v=5, x=4$

4. $3x+4y+2z=44$
   $x+2y=16$
   $5x=30$
   $x=6, y=5, z=3$

5. $5b+2u+6v=44$
   $3b+u=18$
   $3b=12$
   $b=4, u=6, v=2$

6. $5a+4b+2v=28$
   $2a+2b=8$
   $5a=10$
   $a=2, b=2, v=5$

7. $3v+6y+6z=72$
   $6v+y=30$
   $5v=20$
   $v=4, y=6, z=4$

8. $4v+4x+2y=28$
   $2v+4x=16$
   $4v=16$
   $v=4, x=2, y=2$

Linear Systems (H)

Solve each system of equations.

1. $4b + 5x + 3y = 25$
   $3b + 6x = 21$
   $b = 3$

2. $2b + 4c + 4y = 44$
   $4b + 2c = 28$
   $b = 6$

3. $3a + v + 4z = 40$
   $6a + v = 28$
   $6a = 24$

4. $6c + 3y + 6z = 60$
   $2c + 2y = 20$
   $5c = 20$

5. $4b + 4v + 6y = 38$
   $5b + 6v = 44$
   $4b = 16$

6. $4a + 5b + 6x = 52$
   $3a + 4b = 31$
   $6a = 30$

7. $2b + x + 3y = 25$
   $b + 2x = 14$
   $6b = 12$

8. $4b + 4c + 3x = 30$
   $5b + c = 14$
   $b = 2$

Linear Systems (H) Answers

Solve each system of equations.

1. $4b+5x+3y=25$
   $3b+6x=21$
   $b=3$
   $b=3, x=2, y=1$

2. $2b+4c+4y=44$
   $4b+2c=28$
   $b=6$
   $b=6, c=2, y=6$

3. $3a+v+4z=40$
   $6a+v=28$
   $6a=24$
   $a=4, v=4, z=6$

4. $6c+3y+6z=60$
   $2c+2y=20$
   $5c=20$
   $c=4, y=6, z=3$

5. $4b+4v+6y=38$
   $5b+6v=44$
   $4b=16$
   $b=4, v=4, y=1$

6. $4a+5b+6x=52$
   $3a+4b=31$
   $6a=30$
   $a=5, b=4, x=2$

7. $2b+x+3y=25$
   $b+2x=14$
   $6b=12$
   $b=2, x=6, y=5$

8. $4b+4c+3x=30$
   $5b+c=14$
   $b=2$
   $b=2, c=4, x=2$

Linear Systems (I)

Solve each system of equations.

1. $3a+6b+2z=29$
   $a+3b=8$
   $a=5$

2. $3b+5v+5y=32$
   $6b+6v=42$
   $2b=8$

3. $4a+4u+5y=74$
   $5a+u=31$
   $a=5$

4. $3a+5c+3z=48$
   $6a+5c=60$
   $3a=15$

5. $3u+2v+x=17$
   $5u+4v=21$
   $5u=5$

6. $6b+3c+2u=21$
   $b+3c=10$
   $4b=4$

7. $6a+3v+5x=44$
   $3a+5v=33$
   $2a=2$

8. $u+6y+z=18$
   $6u+6y=42$
   $6u=36$

Linear Systems (I) Answers

Solve each system of equations.

1. $3a+6b+2z=29$
   $a+3b=8$
   $a=5$
   $a=5, b=1, z=4$

2. $3b+5v+5y=32$
   $6b+6v=42$
   $2b=8$
   $b=4, v=3, y=1$

3. $4a+4u+5y=74$
   $5a+u=31$
   $a=5$
   $a=5, u=6, y=6$

4. $3a+5c+3z=48$
   $6a+5c=60$
   $3a=15$
   $a=5, c=6, z=1$

5. $3u+2v+x=17$
   $5u+4v=21$
   $5u=5$
   $u=1, v=4, x=6$

6. $6b+3c+2u=21$
   $b+3c=10$
   $4b=4$
   $b=1, c=3, u=3$

7. $6a+3v+5x=44$
   $3a+5v=33$
   $2a=2$
   $a=1, v=6, x=4$

8. $u+6y+z=18$
   $6u+6y=42$
   $6u=36$
   $u=6, y=1, z=6$

Linear Systems (J)

Solve each system of equations.

1. $4c + 2y + 4z = 28$
   $6c + 2y = 16$
   $3c = 6$

2. $6b + 6c + 2u = 22$
   $4b + c = 9$
   $4b = 8$

3. $4v + 5x + 4z = 26$
   $2v + 4x = 12$
   $v = 2$

4. $4c + 5y + 6z = 36$
   $2c + 2y = 10$
   $6c = 6$

5. $2b + v + 3y = 16$
   $5b + v = 10$
   $3b = 3$

6. $6a + 6b + 2c = 50$
   $5a + 6b = 36$
   $a = 6$

7. $2a + 5u + 3y = 14$
   $a + 2u = 5$
   $2a = 6$

8. $3b + 5u + 3v = 46$
   $5b + 2u = 15$
   $2b = 2$

Linear Systems (J) Answers

Solve each system of equations.

1. $4c+2y+4z=28$
   $6c+2y=16$
   $3c=6$
   $c=2, y=2, z=4$

2. $6b+6c+2u=22$
   $4b+c=9$
   $4b=8$
   $b=2, c=1, u=2$

3. $4v+5x+4z=26$
   $2v+4x=12$
   $v=2$
   $v=2, x=2, z=2$

4. $4c+5y+6z=36$
   $2c+2y=10$
   $6c=6$
   $c=1, y=4, z=2$

5. $2b+v+3y=16$
   $5b+v=10$
   $3b=3$
   $b=1, v=5, y=3$

6. $6a+6b+2c=50$
   $5a+6b=36$
   $a=6$
   $a=6, b=1, c=4$

7. $2a+5u+3y=14$
   $a+2u=5$
   $2a=6$
   $a=3, u=1, y=1$

8. $3b+5u+3v=46$
   $5b+2u=15$
   $2b=2$
   $b=1, u=5, v=6$