

System of Equations**Moderate****Linear - Three Variables**

1. *elimination* $3x + y + z = -1$, $4x + 2y - z = 6$, $x + y - 3z = 11$
2. *substitution* $x + 2y - 3z = -23$, $4y + 2z = -4$, $-x + y - z = -2$
3. *substitution* $x + 2y - 3z = -13$, $4y + 2z = 2$, $-x + y - z = -2$
4. *elimination* $x + 2y - 3z = -27$, $4y + 2z = 10$, $-x + y - z = -4$
5. *substitution* $x + y - z = 3$, $2x + y + z = 5$, $3x - 2y + z = 4$
6. *elimination* $x + y - z = 0$, $x + 2y - 3z = -6$, $-2x + 3y - 4z = 10$
7. *substitution* $x + y + z = 24$, $x - 2y + 0 = 0$, $2x + 3y + 1 = 12$
8. *elimination* $5x - 2y + 4z = 9$, $x + y + z = 6$, $4x + 3y + 3z = 3$
9. *substitution* $x + 2z = 8$, $x - 2y - 2z = 4$, $2x + 5y - 6z = 6$
10. *elimination* $y + z = -4$, $5x + 4y - 16z = -6$, $x - y + 5z = 6$

Answers**System of Equations****Moderate****Linear - Three Variables**

1. $x = 2, z = -4, y = -3$

2. $x = -5, z = 4, y = -3$

3. $x = -2, z = 3, y = -1$

4. $x = -4, z = 7, y = -1$

5. $x = 2, z = 0, y = 1$

6. $x = -4, z = 10, y = 14$

7. $x = \frac{22}{7}, z = \frac{135}{7}, y = \frac{11}{7}$

8. $x = -15, z = 21, y = 0$

9. $x = 6, y = 0, z = 1$

10. $y = -4, x = 2, z = 0$