**Assignment: Solving Systems with 3 Equations**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

**Solve each system algebraically. Show Work!**

1. x = 2 5. x + y + z = 5

x + y = 1 x + 2y = 4

3x – 2y + z = 2 2x + y = 5

2. 2x – y = 1 6. x – y + 3z = 6

3x + y = 4 y + z = 4

x + y - 2z = 6 3y – z = 0

3. x = 2z 7. x + y + z = 4

y = 3z x + 2y – z = 3

x + y + 5z = 30 x – y = -4

4. x + 2y = -2 8. x + y – z = 3

3x – y = -13 2x + y + z =12

x + y – z = -3 -4x + 2y + z = -18