

## Algebra 2

### WS: Solving Three Variable Systems

Name \_\_\_\_\_

Date \_\_\_\_\_ Block \_\_\_\_\_

Solve the following systems using any algebraic method.

$$x + 5y - 7z = 6$$

1.  $y - 3z = 7$

$$z = -4$$

$$x + y + z = 6$$

2.  $x + y - z = 0$

$$x - y + z = 4$$

$$x + 2y - 3z = -8$$

3.  $2x + y + 3z = 17$

$$x - 3y + 3z = 11$$

$$x + 2y - z = 3$$

4.  $x - 3y + z = -1$

$$-x + y - 3z = 5$$

$$2x + 3y + 2z = 1$$

5.  $x + 4y - z = 7$

$$3x + y + 3z = -2$$

$$x - 2y + 3z = -7$$

6.  $4x + 5y + z = 4$

$$-x + y - 2z = 5$$

$$x + 5y - 2z = -16$$

7.  $-x - 7y + 3z = 23$

$$3x - 10y - 5z = 5$$

$$3x + 2y - 8z = 4$$

8.  $6x + 4y - 16z = 8$

$$12x + 8y - 32z = 16$$