

Name: _____
PCH: Solving Multivariable Linear Systems

Date: _____
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Do Now

Solve each of the following systems algebraically:

1. $8x - 4y = 4$
 $4x - 2y = 2$

2. $3x - 6y = 9$
 $-2x + 4y = 1$

3. Solve algebraically: $x - 2y + 3z = 9$
 $-x + 3y = -4$
 $2x - 5y + 5z = 17$

Answer is an ordered triple (, ,)

Remember for a system of linear equations, exactly one is true:

1. There is exactly one solution
2. There are infinitely many solutions.
3. There is no solution.

For 1-5, solve the system of linear equations.

$$3x - 2y + 4z = 1$$

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

$$2x - 3y + 6z = 8$$

$$4x + y - 3z = 11$$

2. $2x - 3y + 2z = 9$

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

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

3. $y - z = 0$

$$-x + 2y = 1$$

$$x + y + z = 5$$

4. $-4x + 2y - 3z = -9$

$$2x - 3y + 2z = 5$$

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

5. $x - 2z = 1$

$$2x - y - z = 0$$