

Question 1 of 5

Determine if the ordered triple is a solution to the system of equations.

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

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

$$5x - 2y + 4z = 7$$

Part 1 of 2

(a) $(1, 1, 1)$ a solution to the system of equations.

Part 2 of 2

(b) $(3, 2, -1)$ a solution to the system of equations.

Question 2 of 5

Solve the system. If the system has one unique solution, write the solution set. Otherwise, determine the number of solutions to the system, and determine whether the system is inconsistent, or the equations are dependent.

$$5x + 4y - 4z = -17$$

$$-4x + y - 8z = 43$$

$$-6x - 3y + 4z = 21$$

☐

The system has one solution.

The solution set is $\{(\square, \square, \square)\}$.

☐

The system has no solution.

☐

The system is inconsistent.

☐

The equations are dependent.

☐

The system has infinitely many solutions.

☐

The system is inconsistent.

☐

The equations are dependent.

Question 3 of 5

Solve the system. If the system has one unique solution, write the solution set. Otherwise, determine the number of solutions to the system, and determine whether the system is inconsistent, or the equations are dependent.

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

$$-4x + 5y + z = 3$$

$$8x - 10y - 2z = -8$$

☐

The system has one solution.

The solution set is $\{(\square, \square, \square)\}$.

☐

The system has no solution.

☐

The system is inconsistent.

☐

The equations are dependent.

☐

The system has infinitely many solutions.

☐

The system is inconsistent.

☐

The equations are dependent.

Question 4 of 5

Solve the system. If the system has one unique solution, write the solution set. Otherwise, determine the number of solutions to the system, and determine whether the system is inconsistent, or the equations are dependent.

$$x - 6y - 5z = 3$$

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

$$x - 14z = -6$$

☐

The system has one solution.

The solution set is $\{(\square, \square, \square)\}$

☐

The system has no solution.

☐

The system is inconsistent.

☐

The equations are dependent.

☐

The system has infinitely many solutions.

☐

The system is inconsistent.

☐

The equations are dependent.

Question 5 of 5

Solve the system of equations. If the system has one unique solution, write the solution set. Otherwise, determine the number of solutions to the system, and determine whether the system is inconsistent, or the equations are dependent.

$$x - 6y + 3z = -5$$

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

$$2x - 12y + 6z = -10$$



The system has one solution.

The solution set is $\{(\square, \square, \square)\}$.



The system has no solution.



The system is inconsistent.



The equations are dependent.



The system has infinitely many solutions.



The system is inconsistent.



The equations are dependent.