

# Math 1513 - College Algebra

## Discussion Board Week 13 - Due 2014.11.16

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Solve by elimination. Indicate if the system is inconsistent or has an infinite number of solutions. Leave your final answers in fractional form, do NOT use decimals.

1.

$$\begin{aligned}4x - 3y + 2z &= 1, \\4x + 2y - 5z &= 0, \\3x + 3y + 3z &= 3\end{aligned}$$

2.

$$\begin{aligned}4x - 3y + 2z &= 1, \\4x + 3y - 6z &= 0, \\3x + 2y - z &= 3\end{aligned}$$

3.

$$\begin{aligned}4x + 3y - 2z &= -1, \\4x + 3y + 5z &= 0, \\13x + 2y - z &= 3\end{aligned}$$

4.

$$\begin{aligned}5x + 2y - 2z &= -1, \\4x + 3y + 5z &= 0, \\9x + 5y + 3z &= 3\end{aligned}$$

5.

$$\begin{aligned}5x + 2y - 2z &= -1, \\4x + 3y + 5z &= 0, \\9x + 5y + 3z &= -1\end{aligned}$$

6.

$$\begin{aligned}6x + 4y + 5z &= 12, \\-5x - 3y + 8z &= 2, \\10x - 5y - 3z &= -12\end{aligned}$$

7.

$$\begin{aligned}5x - 8y + 5z &= 12, \\-5x - 3y + 8z &= 2, \\10x - 5y - 3z &= -12\end{aligned}$$

8.

$$\begin{aligned}5x - 8y + 5z &= 10, \\-5x - 3y + 8z &= 2, \\10x - 5y - 3z &= -12\end{aligned}$$

9.

$$\begin{aligned}5x - 8y + 5z &= 12, \\-6x - 3y + 8z &= 2, \\-x - 11y + 13z &= 14\end{aligned}$$

10.

$$\begin{aligned}5x - 8y + 5z &= 12, \\-6x - 3y + 8z &= 2, \\-x - 11y + 13z &= 13\end{aligned}$$

11.

$$\begin{aligned}12x + 3y - 7z &= 3, \\4x + 4y - 6z &= -1, \\3x - 2y + 8z &= 3\end{aligned}$$

12.

$$\begin{aligned}12x + 3y - 7z &= 3, \\15x + y + z &= 6, \\3x - 2y + 8z &= 3\end{aligned}$$

13.

$$\begin{aligned}12x + 3y - 7z &= 3, \\15x + y + z &= 5, \\3x - 2y + 8z &= 3\end{aligned}$$

14.

$$\begin{aligned}12x + 3y - 6z &= 4, \\4x + 4y - 6z &= -1, \\3x - 10y + 8z &= 3\end{aligned}$$

15.

$$\begin{aligned}12x + 3y - 6z &= 4, \\4x + 4y - 6z &= -1, \\-16x - 7y + 12z &= -3\end{aligned}$$

16.

$$\begin{aligned}12x + 3y - 6z &= 5, \\4x + 4y - 6z &= -1, \\-16x - 7y + 12z &= -3\end{aligned}$$

17.

$$\begin{aligned}2x + 3y - 6z &= 5, \\4x - 8y + z &= -1, \\-16x - 7y + 12z &= -3\end{aligned}$$

18.

$$\begin{aligned}2x - 3y - 6z &= -5, \\4x - 2y + z &= -1, \\-6x - 3y + 12z &= -3\end{aligned}$$

19.

$$\begin{aligned}2x + 7y + 3z &= 3, \\-4x + 7y + 2z &= 0, \\3x + 2y + 7z &= -3\end{aligned}$$

20.

$$\begin{aligned}2x + 7y + 3z &= 3, \\-4x + 7y + 2z &= 1, \\-2x + 14y + 5z &= -3\end{aligned}$$

21.

$$\begin{aligned}2x + 7y + 3z &= 3, \\-4x + 7y + 2z &= 1, \\-2x + 14y + 5z &= 0\end{aligned}$$

22.

$$\begin{aligned}-2x + 5y + 3z &= 3, \\-4x + 2y + 2z &= 1, \\-2x - 3y + 2z &= 5\end{aligned}$$

23.

$$\begin{aligned}2x + 5y + 3z &= 3, \\ -4x + 2y + 2z &= 1, \\ -2x + 8y + 7z &= 4\end{aligned}$$

24.

$$\begin{aligned}2x + 5y + 3z &= 3, \\ -4x + 2y + 2z &= 1, \\ -2x + 8y + 7z &= -4\end{aligned}$$

25.

$$\begin{aligned}2x + 5y + 3z &= 3, \\ -4x + 2y + 2z &= 1, \\ 2x - 7y - 5z &= -4\end{aligned}$$