



Chapter 7 Exponential & Log Functions

Sections:

Section 7.1 Linear Systems

Video 1:

Is $(2, -3, 2)$ a solution to
$$\begin{cases} x + y + z = 1 \\ 3x + 4y + z = -4 \\ 2x + y + 2z = 5 \end{cases}$$

Video 2:

Solve the system:
$$\begin{cases} 5x + 3y - 2z = 1 \\ x - y + z = 6 \\ 2x + 2y - z = -1 \end{cases}$$

Video 3:

Solve the system:
$$\begin{cases} x - y + 2z = 5 \\ 2x + y + z = 7 \\ 3x - 2y + 5z = 20 \end{cases}$$

Video 4:

Solve the system:
$$\begin{cases} x - y + z = 7 \\ 3x + 2y - 12z = 11 \\ 4x + y - 11z = 18 \end{cases}$$

Section 7.2 Nonlinear Systems

Video 1:

Solve the system:
$$\begin{cases} x^2 + 4y^2 = 16 \\ x + 2y = 4 \end{cases}$$

Video 2:

$$\text{Solve the system: } \begin{cases} x^2 + 4y^2 = 5 \\ 9x^2 - y^2 = 8 \end{cases}$$

Video 3:

$$\text{Solve the system: } \begin{cases} x^2 - xy + x = -4 \\ 3x^2 - 2xy - 2x = 4 \end{cases}$$

Video 4:

$$\text{Solve the system: } \begin{cases} 4x^2 + y^2 - 9y = -4 \\ 4x^2 - y^2 - 3y = 0 \end{cases}$$