

WebAssign

CH 3.5 (Homework)

Yinglai Wang
MA 265 Spring 2013, section 132, Spring 2013
Instructor: Alexandre Eremenko

Current Score : 20 / 20 Due : Thursday, February 7 2013 11:40 PM EST

The due date for this assignment is past. Your work can be viewed below, but no changes can be made.

Important! Before you view the answer key, decide whether or not you plan to request an extension. Your Instructor may *not* grant you an extension if you have viewed the answer key. Automatic extensions are not granted if you have viewed the answer key.

[Request Extension](#) [View Key](#)

1. 6.66/6.66 points | [Previous Answers](#)

KolmanLinAlg9 3.5.001.

If possible, solve the following linear systems by Cramer's rule.

$$6x_1 + 4x_2 + 6x_3 = 22$$

$$x_1 + 6x_3 = -12$$

$$6x_1 + 3x_2 - x_3 = 42$$

$$\begin{aligned} x_1 &= \boxed{6} \checkmark \\ x_2 &= \boxed{1} \checkmark \\ x_3 &= \boxed{-3} \checkmark \end{aligned}$$

2. 6.66/6.66 points | [Previous Answers](#)

KolmanLinAlg9 3.5.002.

If possible, solve the following linear systems by Cramer's rule.

$$\begin{bmatrix} 1 & 1 & 1 & -2 \\ 0 & 2 & 1 & 3 \\ 2 & 1 & -1 & 2 \\ 1 & -1 & 0 & 1 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \end{bmatrix} = \begin{bmatrix} -4 \\ 8 \\ 3 \\ 0 \end{bmatrix}$$

$$\begin{aligned} x_1 &= \boxed{-1} \checkmark \\ x_2 &= \boxed{1} \checkmark \\ x_3 &= \boxed{0} \checkmark \\ x_4 &= \boxed{2} \checkmark \end{aligned}$$

3. 6.68/6.68 points | [Previous Answers](#)

KolmanLinAlg9 3.5.003.

Solve the following linear system for x_3 , by Cramer's rule.

$$2x_1 + x_2 + 5x_3 = 16$$

$$3x_1 + 2x_2 - 5x_3 = -4$$

$$x_1 + x_2 + 5x_3 = -11$$

$$x_3 = \boxed{0.6} \checkmark$$