

(063) Math 131: Finite Mathematics.Quiz II(3.3,3.4,3.5,3.6): July 18, 2007

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Contents

Marks: 20; Time: 20 Minutes

NAME:.....

I.D.#:

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SERIAL# SECTION #: 01. Marks:

		·	<i>Math131</i>	<i>Smr</i>
		·	<i>Sec.#01</i>	<i>063</i>
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NOTE: SHOW ALL STEPS OF THE SOLUTION.

NO CREDIT FOR ANSWERS WITHOUT COMPLETE SOLUTION.

The questions are not in any order of difficulty at all.

Only the nonprogramable calculators are allowed.

Write the simplified answer of each question at the end of each question.

Q.1. 56T1.1B9. 106Tan34.
(*Nurition*). A dietitian Wishes to plan a meal around three foods.

The meal is to include 8800 units of vitamin *A*, 3380 units of vitamin *C*, and 1020 units of calcium. The number of units of the vitamins and calcium in each ounce of the foods is summarized in the accompanying table:

	<i>Food I</i>	<i>Food II</i>	<i>Food III</i>
<i>Vita min A</i>	400	1200	800
<i>Vita min C</i>	110	570	340
<i>Cacium</i>	90	30	60

Set Up (without solution) to determine the amount of each food the dietitian should include in the meal in order to meet the vitamin and calcium requirements.

Sol: Let $x =$ Number of ounces of Food *I*

Let $y =$ Number of ounces of Food *II*

Let $z =$ Number of ounces of Food *III*.

The system of linear equations is :

Q.2. 94Tan1. Solve the following system of linear equations by using all steps of the solution but without using matrices.

$$3x - 2y + 8z = 9$$

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

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

Solution.

Solution Continued.

Answer:

$$x = \text{-----}$$

$$y = \text{-----}$$

$$z = \text{-----}$$