

(082) Math 131:Finite MathematicsQuizTest(3.3-3.6): April.01, 2009

Dr. Latif and Dr. Raja Latif and Dr. Muhammad Latif and Dr. Abdul Latif

Contents

Marks: 20; Time: 20 Minutes

NAME:.....

I.D.#:

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SERIAL# SECTION #: (check: Sec.03A)

03A		8 a	9 a	10 a
		1 m	2 m	3 m

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.

(Marks : 8). (Inventory Control).(64MS67).
An art teacher finds that colored paper can be bought in three different packages.

The first package has 20 sheets of white paper, 15 sheets of blue paper, and 1 sheet of red paper.

The second package has 3 sheets of blue paper, and 1 sheet of red paper.

The last third package has 40 sheets of white paper, and 30 sheets of blue paper.

Suppose he needs 200 sheets of white paper, 180 sheets of blue paper, and 12 sheets of red paper.

How many each type of package should he order?

Set up the System of Linear Equations (without Solution) to find the number of each type of packages.

Let x = Number of first type of packages.

Let y = Number of second type of packages.

Let z = Number of third type of packages.

$$(A) \left\{ \begin{array}{l} 2x + 4z = 18 \\ 15x + 3y + 30z = 200 \\ x + z = 12 \end{array} \right.$$

$$(B) \left\{ \begin{array}{l} 2x + 4z = 20 \\ 15x + 3y + 30z = 18 \end{array} \right.$$

$$(C) \left\{ \begin{array}{l} x + y = 12 \\ 20x + 40z = 20 \\ 15x + 3y + 30z = 180 \end{array} \right.$$

$$(D) \left\{ \begin{array}{l} x + y = 12 \\ 40x + 20z = 200 \\ 15x + 30y + 3z = 180 \end{array} \right.$$

$$(E) \left\{ \begin{array}{l} x + y = 12 \\ 2x + 4z = 20 \\ 15x + 3y + 30z = 180 \end{array} \right.$$

$$(F) \left\{ \begin{array}{l} x + y = 12 \\ 2x + 4z = 20 \\ 15x + 3y + 30z = 180 \end{array} \right.$$

$$(G) \left\{ \begin{array}{l} x + y = 12 \\ 20x + 40z = 200 \\ 30x + 15y + 3z = 180 \end{array} \right.$$

$$(H) \left\{ \begin{array}{l} x + y = 12 \\ 4x + 2z = 18 \\ 15x + 3y + 3z = 20 \end{array} \right.$$

$$(I) \left\{ \begin{array}{l} x + z = 12 \end{array} \right.$$

(N) NONE OF THE ABOVE CHOICES IS CORRECT.

Q.2. (Marks:12). (63MS39). (Do Not Use Matrices).
Solve the following system of Equations on the reverse side of the paper.

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

$$3x + y + z = 0$$

$$2x - y + 2z = 1$$

Answer: $x =$ _____

$y =$ _____

$z =$ _____