

PRE TEST

LINEAR ALGEBRA I

1. A man is ordered by his doctor to take 5 units of vitamin A, 13 units of vitamin B, and 23 units of vitamin C per each day. Three brands of vitamin pills are available, and the number of units of vitamin per pill are shown in the accompanying table:

Brand	Vitamin		
	A	B	C
1	1	2	4
2	1	1	3
3	0	1	1

Find the model of this case as linear equations! Find the solution?

2. Determine the value of a, b, c, d such that the following system of linear equation has no solution, one solution and infinitely solutions:

$$ax + by = p$$

$$cx + dy = q$$