1. Verify that the following are solutions for all value of s and t

$$x=19t-35$$

$$y=25-13t \text{ is a solution of } 2x+3y+z=5$$

$$5x+7y-4z=0$$

2. A zookeeper wants to give an animal 42 mg of vitamin A and 65 mg of vitamin D per day. He has two supplements: the first contains 10% vitamin A and 25% vitamin D. The second contains 20% vitamin A and 25% vitamin D. Formulate this problem as a system of linear equations!