Quiz 4 Class 19

Linear Algebra I

NAME & ID(Please print legibly)

Section:
Week 5

PLEASE SHOW ALL YOUR WORK.

1. Find the complete solution of

$$\begin{aligned} x + 3y + z + t &= 3 \\ 2x - 2y + z + 2t &= 8 \\ x - 5y + t &= 5 \end{aligned}$$

2. Consider a linear system whose augmented matrix is of the form

$$\begin{bmatrix} 1 & 1 & 3 & 2 \\ 1 & 2 & 4 & 3 \\ 1 & 3 & a & b \end{bmatrix}$$

   (a) For what values of a and b will the system have infinitely many solutions?

   (b) For what values of a and b will the system be inconsistent?