1. Find all points of intersection of the plane 8x+2y-7z=2 and the line

(x,y,z)=(1,-2,1)+t(-2,1,-1)

2. Find the equation of the plane through P(0,-2,1), Q(1,0,1) and R(0,1,2)

3. If u=(2,-x,1) and v=(x,1,-2) are at an angle of , then x is…

4. The distance between u(1,2,3) and v(3,2,1) is

5. Find a, b and c so that the system has the solution

6. Compute the rank of the matrix

7. Determine the values of k so that the system of equations

has a unique solution.

8. Determine the values of k such that the system of linear equations is consistent

9. Let .

If is the augmented matrix of a system of linear equations. Solve the system.

10. Find (v + 3w)•(v – 2w) if and v•w = -3.