## Section 12.5 example problems.

1. Find the equation of the line through the point (-2, 4, 10) and parallel to the vector <3, 1, -8>.

2. Find the equation of the line through the points (1, 3, 2) and (-4, 3, 0).

3. Find the equation of the line of intersection of the planes x + y + z = 1 and x + z = 0.

4. Find the equation of the plane through the point (6, 3, 2) and perpendicular to the vector <-2, 1, 5>.

5. Find the equation of the plane through the points (0, 1, 1), (1, 0, 1), and (1, 1, 0).

6. Find the equation of the plane with x-intercept a, y-intercept b, and z-intercept c.