

## Math 220 - Calculus f. Business and Management - Worksheet 40

### Worksheet 40 - 3-Space

#### Exercise 1:

Find an equation for the line that passes through  $(2, 7)$  and  $(4, 3)$  in the form  $px + qy + r = 0$ . Use the techniques of elimination demonstrated in Section 25 in your textbook. Verify that your answer is correct by checking to see that each point satisfies your equation.

**Exercise 2:** Find the equation for the plane that passes through each set of points in the form  $px + qy + rz + s = 0$ . Use the techniques of elimination demonstrated in Section 25 in your textbook. Verify that your answer is correct by checking to see that each point satisfies your equation.

2a)  $(3, 0, 0), (2, 1, 0), (0, 4, 1)$

2b)  $(1, 4, 1), (1, 7, 3), (3, 9, 1)$