

Show all work. 5 points each.

1) Find  $proj_{\mathbf{a}}\mathbf{b}$  if  $\mathbf{a} = \langle 3, -4 \rangle$  and  $\mathbf{b} = \langle 5, 0 \rangle$

2) Find the Volume of the parallelepiped with adjacent edges  $PQ, PR, PS$ :  
 $P(2, 0, -1), Q(4, 1, 0), R(3, -1, 1)$  and  $S(2, -2, 2)$ .