

## *Quiz #6*

Friday, October 6

**PHYSICS 851, FALL 2000**

1. In terms of  $\ell$ ,  $m_1$  and  $m_2$  find expressions for:

(a)  $\langle \ell m_1 | L_x^2 | \ell m_2 \rangle$

(b)  $\langle \ell m_1 | L_x L_y | \ell m_2 \rangle$