

DISCUSSION PROBLEMS, VECTORS I

- (1) Find the length of both diagonals on a parallelogram with corners  
 $(1, 1), (2, 3), (2, 0), (3, 2)$

- (2) Find the angle between these diagonals.

- (3) A *Rhombus* is a parallelogram with all 4 edges the same length. Prove that a Rhombus has diagonals which are perpendicular to each other. (Remember, a proof is any explanation of why something is true!)