

Name: _____

This quiz covers: 9.1, 9.2 and 9.3.

Directions: Complete all question and **show all applicable work.** Partial credit will be given. All questions are equally weighted.

1.) Draw a three dimensional axis using the right hand rule where the positive y-axis points down and the positive x-axis points right. Be sure to note which side of each axis is positive.

2.) Given $u = \langle 3, 5 \rangle$ and $v = \langle 5, -2 \rangle$, compute:

1. $u + v =$

2. $u - v =$

3. $u \cdot v =$

3.) Using u and v from the prior problem, compute BOTH the scalar and vector projections of u onto v .