

Name:

Math 208, Section 3

Quiz number 2

Show all work. How you get your answer is just as important, if not more important, than the answer itself. If you think it, write it!

For the points $\mathbf{P} = (1, 2, 3)$ and $\mathbf{Q} = (3, -2, 7)$ in 3-space, find

- (a) the vector \mathbf{v} (in coordinate form) from \mathbf{P} to \mathbf{Q} ,
- (b) the length of this vector \mathbf{v} , and
- (c) the vector, pointing in the opposite direction from \mathbf{v} , which is 3 times as long.