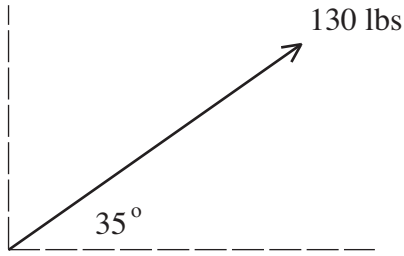


**Quiz 2. Math 10-270. February 1, 2012. Name**

1) The vector in the diagram below represents a force of magnitude 130 pounds. Draw into the diagram the horizontal and vertical components of this force and compute their magnitudes.



2) Make a careful drawing of a column and beam or post and lintel element. Explain what its primary structural limitation is. Explain why this is so with the aid of an additional diagram.

3) Describe the advantages and disadvantages of Roman concrete. Describe the use that the Romans made of it.