## Quiz 2. January 30, 2013. Name

1. The diagram below depicts a force (of 100 pounds) and a direction (at an angle of $30^{\circ}$ with the direction of the force). Draw carefully into the diagram the component of this force in the indicated direction. Compute the magnitude of this component.

2. Use the Law of Cosines $\left(c^{2}=a^{2}+b^{2}-2 a b \cos \theta\right)$ to determine the magnitude of the resultant of the two forces (one of 70 pounds, the other of 90 pounds) depicted in the diagram below:

