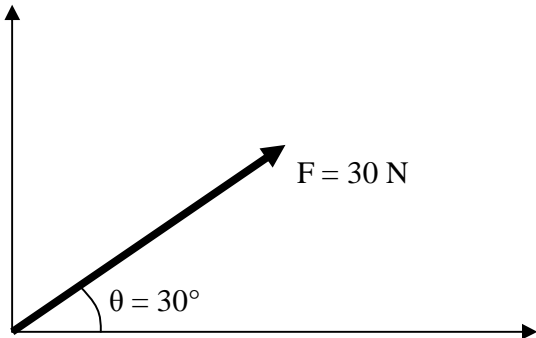


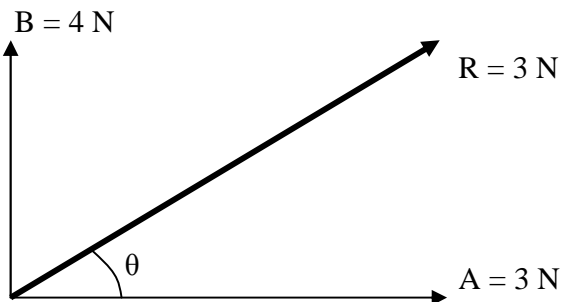
## Homework 14

Work each problem below. You may complete the assignment on this paper.

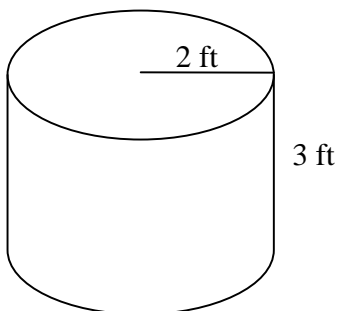
1. Given a vector **F** with a magnitude of 30 N and an angle off the  $x$ -axis of  $30^\circ$ , determine the  $x$  and  $y$  components of the vector.



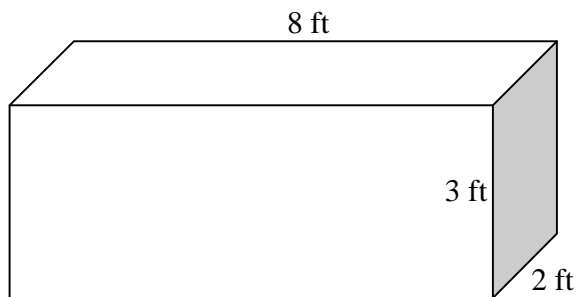
2. Given a vector **A** with magnitude 3 N along the  $x$ -axis and a vector **B** with magnitude 4 N along the  $y$ -axis, determine resultant **R** by determining the magnitude of **R** and the angle  $\theta$  in degrees.



3. Given the following cylinder, find its surface area and volume.



4. Given the following box, find its surface area and volume.



*Due Wednesday, June 24, at the beginning of class.*