NAME:

Exercise 1 A kite is flying at an angle of elevation of $\frac{\pi}{3}$. The kite string is being taken in at the rate of $1ms^{-1}$. If the angle of elevation does not change, how fast is the kite losing altitude?

Solution.

1. Draw a picture and label the variables and constants.

2. What is given? What do you have to find out? (Answer these in terms of the diagram and the variables in part 1.)

3. Solve the problem.