Related Rates Problems

1. List the values (including the rate) you are given.

2. Write the rate you seek.

3. Draw a picture and use geometry, etc. to help write an

equation for the measure whose rate you seek. Do not substitute in any values yet!

4. Use substitution to rewrite any variables for which you have no values in terms of variables for which values are given. It is still too early to put any values in!

5. Differentiate the equation.

6. NOW substitute in given values and solve for the rate you seek. Voila.