

CALCULUS JOURNAL
RELATED RATES

1. Related rate problems are so named because _____

2. To convert the original equation to an equation involving rates, you must _____
_____ by using _____.
3. When setting up related rate problems, variables should be used to label _____
_____ while numbers should be used to label _____.
4. How do you determine whether to reduce the number of variables in a problem before taking the derivative or to use all variables in the original formula? _____

5. Problems which involve the rate at which an angle is changing usually require the use of _____
_____ to set up the initial equation.
6. The volume of a prism is found by _____.
7. The geometric concept of _____ can be used to create a relationship between two variables which do not have a direct relationship (such as the width and depth of a trough).
8. List and describe three common errors to avoid when working related rate problems.
 - 1.
 - 2.
 - 3.
9. Write a series of steps for solving related rate problems.