

Section 3.8 Related Rates

- Read and re-read the problem until you understand it.
- Draw and label a picture which gives the relevant information (if possible).
- Introduce notation. Assign a symbol to every quantity that is a function of time.
- Express the given the info and the required rate in terms of derivatives and equations.
- Differentiate all variables implicitly as functions of time t
- Substitute the given into into resulting equation and solve for the unknown rate.