

Continuity and the Intermediate Value Theorem

After completing this section, students should be able to do the following.

- Identify where a function is, and is not, continuous.
- Understand the connection between continuity of a function and the value of a limit.
- Make a piecewise function continuous.
- State the Intermediate Value Theorem including hypotheses.
- Determine if the Intermediate Value Theorem applies.
- Sketch pictures indicating why the Intermediate Value Theorem is true, and why all hypotheses are necessary.
- Explain why certain points exist using the Intermediate Value Theorem.
- Bisection method.