

Explorations in Problem Solving – Advanced Topics

Introduction

Welcome to "Explorations in Problem Solving - Advanced Topics". If you would like to learn more about the nature of mathematical problem solving, we welcome you to this tutorial. Our exploration of the nature of math problem solving will cover many areas – algebra, geometry, topology, probability and statistics, and even the role of intuition in mathematics.. We will go beyond standard textbook approaches and learn different ways to analyze and think about new problems. We will learn to approach new problems asking questions such as what are the main features of the problem, what do we already know that we can use to solve the problem, and what additional facts would help us find a solution.

Extracting the Files, Running the Program

- Extract the contents of AdvTopics.zip by right-clicking the file and selecting "Extract All". We suggest you extract the contents of the file to a new folder named "ADVTOPICS".
- To begin the program, open the "ADVTOPICS" folder and double-click ADVSTART.exe. A menu will appear and we suggest you start by beginning with the first lesson - "1 – Description of Intelligent Tutor Problem Solving". The lesson explains keyboard shortcuts and gives an overview of the course.