



## **Learning Project 1**

# **The Number Line And Informational Graphing**



### **Introduction**

This Learning Project is a great one to introduce your students to the GED Math test in general and to the procedures that are recommended for the Math Inquiry Activities. Mathematically, they focus on reading and interpreting informational graphs, some of which have sophisticated subjects, but do not require complex tasks. The activities come from items #1, #20, #21, and #15 (in that order) from the Official Practice Test, Form PA.

All the graphs are rectangular with two perpendicular axes, a familiar type to most students. Most students will not find a calculator to be helpful in finding answers to any of the items, but some like to have it at hand anyway. The activities are arranged so that they begin with the simple ideas and build on them to advance to the more complex.

The mathematical tasks begin with reading values from a graph, directly in Inquiry 1-1, and then using interpolation in 1-3 and 1-4. They also include interpreting what the graph is telling them, including the significance of some special points, the intercept in 1-2 and the intersection of two lines in 1-3. In the Reflection and Extension steps, the students are made aware that the steepness of the line is telling them about how fast a quantity is changing. That idea is treated more specifically in later Learning Projects.

In addition to the mathematics, this Learning Project also emphasizes some test-taking strategies that are important to your students. It stresses the importance of careful reading of the graphs as well as the questions to grasp the details. For multiple-choice questions, it recommends that students eliminate unreasonable answer choices from consideration at the outset. It also introduces the standard grid that will be used to record the answers for the items that are not multiple-choice.

Because these items do not involve any complex computations, this Learning Project can also succeed in easing the students' fear about the GED Math test and instilling confidence that they can pass the test.