Lesson 8: Making Inferences

GEE 21
Graduation Exit Examination
for the 21ˢᵗ Century

Selected Content Standards

Benchmarks Addressed:

D-5-M *Comparing experimental probability results with theoretical probability (e.g., representing probabilities of concrete situations as common fractions, investigating single-event and multiple-event probability, using sample spaces, geometric figures, tables, and/or graphs)*

D-7-H *Making inferences from data that are organized in charts, tables, and graphs (e.g., pictograph; bar, line, or circle graph; stem-and-leaf plot or scatter plot)*

GLEs Addressed:
Grade 8
    44. Use experimental data presented in tables and graphs to make outcome predictions of independent events (D-5-M)
Grade 10
    22. Interpret and summarize a set of experimental data presented in a table, bar graph, line graph, scatter plot, matrix, or circle graph (D-7-H)

Lesson Focus:
In many ways this lesson is a continuation of Lesson Five. Students are asked to analyze graphs within the context of a problem-solving situation.

GEE 21 Connection
Students will be required to:
- Interpret and summarize a set of experimental data presented in a table, bar graph, line graph, or circle graph in context
- Make predictions based on the calculation of the probability of independent event, in a described situation or using experimental data presented in tables or graphs

Translating Content Standards into Instruction

Begin with **Teacher Blackline #1**. As a class look at (a). Encourage students to tell stories that would match the graph. Point out to them that (a) is a line that starts at (0,0) Ask them about the rate of growth they see. We want them to see that this is a steady rate of growth.   Ask what real life situations would generate a graph like (a). Divide the students into groups and ask them to discuss (b). Point out to them that the graph starts somewhere on the y-axis. Ask them to decide what rate of growth they see and to come up with a real-life situation that this graph might model. Follow with each of the other four graphs, asking about the rate of growth and a real world model. If students have trouble with this exercise, present the following situations and ask them