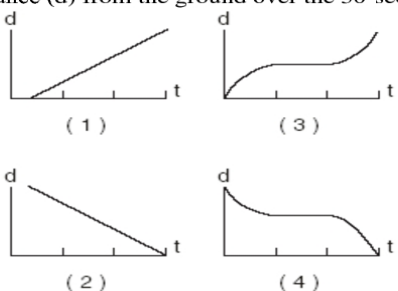


Resources:	
TI 83+ graphing calculators for every student. JMAP <i>Three Views of a Function</i> Worksheet: JMAP <i>Relating Graphs to Events</i> Worksheet:	
Homework:	Evaluation:
JMAP <i>Relating Graphs to Events</i> Worksheet:	JMAP Regents Book by Topic <i>Algebra/Graphs and Statistics/</i> <i>Relating Graphs to Events</i>

Classroom Dialogue

DO NOW: Math B Regents Question

A bug travels up a tree, from the ground, over a 30-second interval. It travels fast at first and then slows down. It stops for 10 seconds, then proceeds slowly, speeding up as it goes. Which sketch best illustrates the bug's distance (d) from the ground over the 30-second interval (t)?



Solution and Discussion Questions:

- Q1. What two variables are being compared in this graph?
 A1. Height and time.
- Q2. Which is the independent variable and which is the dependent variable?
 A2. Time is independent (x-axis) and height is dependent (y-axis).
- Q3. What might be the appropriate domain, range, and intervals to use in labeling the x and y axes of this graph?
 A3. The domain of the x-axis is 30 seconds with 10 second intervals. The range of the y axis is unknown.
- Q4. What knowledge is this question trying to measure?
 A4. Answers may vary. Elicit general knowledge about using graphs to find relationships between variables. Cover as many of the following big ideas as possible.

Big Ideas from Basic Algebra:

- **Graphs** are used to visualize relationships between two variables.
 - The independent variable is measured on the x-axis
 - The dependent variable is measured on the y-axis