

## **Activity 8:**

## Is leisure time really shrinking?

## **USA TODAY Snapshots**

#### Is leisure time really shrinking? The median number of hours a week Americans say they spend on work (including commuting, housework and school) vs. leisure hasn't changed much in the '90s: ■Work Leisure 50.7 50.8 49.9 50.2 48.8 46.9 40.6 26.2 19.5 19.4 19.8 19.5 16.6 1994 1997 1973 1980 1987 1998 1999 Source: Harris Poll

USA TODAY

#### **Activity Overview:**

This activity will give you the opportunity to work with a system of equations. In this case, the equations modeling the data from the USA TODAY Snapshot, "Is leisure time really shrinking?" will be quadratic. You will study the graphs and determine if they intersect, and if so, you will find the intersection point. You will analyze data and explain any trends in the data. Finally, you will examine a predicted value from the model and compare it to the actual value listed, by determining the percent error between the two values.

#### **Focus Questions:**

- Q. Describe the trend in the difference between work and leisure time for the period shown in the USA TODAY Snapshot.
- Q. Will there be a time when the number of hours spent by Americans on leisure will equal the number of hours spent on work? If yes, predict when this will happen.
- Q. Using the mathematical model, predict the year when the maximum time was spent on work and determine the percent error in the prediction as compared to the value listed in the USA TODAY Snapshot for that year.



For use with the TI-Navigator™ Classroom Learning System

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