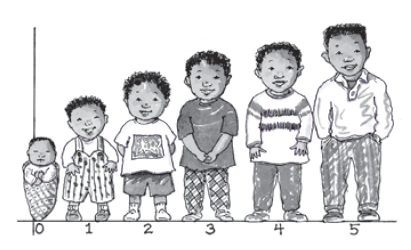
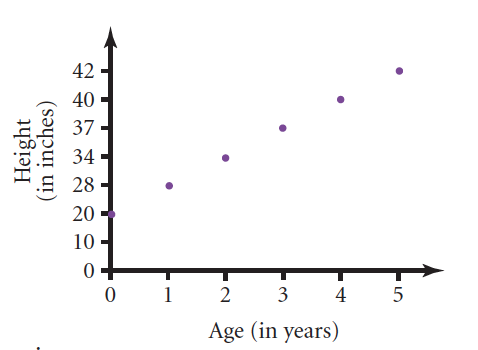
**The Issues Involved**

1. In *In Need of Numbers*, you put appropriate scales on the axes of different graphs.

Make a list of difficulties you had and questions you would like answered that are related to scaling the axes of a graph.

1. Here are some questions about scaling. Use examples to explain your thinking. Be detailed in your explanations.
   * 1. Should the vertical axis always begin at zero? What is the effect if the axis does not begin at zero? What about the horizontal axis?
     2. Once you have decided on a scale, how do you decide which numbers to write along the axes?
2. The graph shows the average height of boys in the United States at different ages.

The graph seems to suggest that boys grow at a constant rate through age 5.

* + 1. Why might someone make this conclusion from a quick glance at the graph?
    2. Why is this conclusion incorrect?
    3. Redraw the graph so it is not misleading.

1. Suppose you wanted to sketch a graph showing the number of horse births on one ranch over the past 20 years. Would you use a continuous or a discrete graph to represent this situation? Why?