7-7 Word Problem Practice
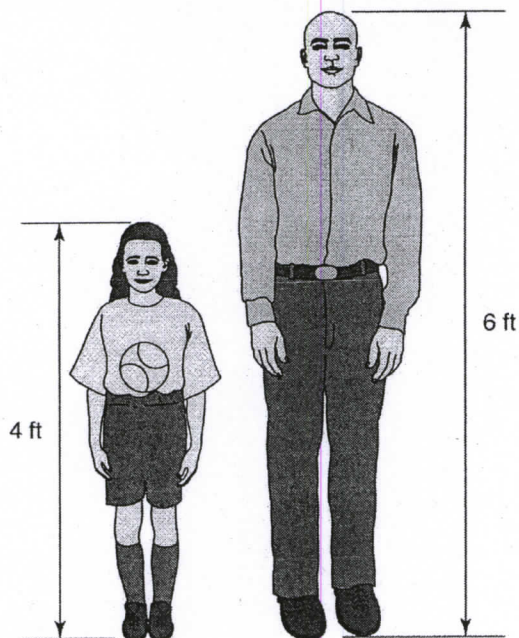## Scale Drawings and Models

1. MODELS Luke wants to make a scale model of a Boeing 747 jetliner. He wants every foot of his model to represent 50 feet. Complete the following table.

Part	Actual length (in.)	Model length (in.)
Wing Span	2537	
Length	2782	
Tail Height	392	

(**Source:** Boeing)

2. PHOTOGRAPHS Tracy is 4 feet tall and her father is 6 feet tall. In a photograph of the two of them standing side by side, Tracy's image is 2 inches tall.

4 ft

6 ft

Although their images are much smaller, the ratio of their heights remains the same. How tall is Tracy's father's image in the photo? What is the scale of the photo?

3. TOWERS The Tokyo Tower in Japan is currently the world's tallest self-supporting steel tower. It is 333 meters tall.

a. Heero builds a model of the Tokyo Tower that is 2775 millimeters tall. What is the scale of Heero's model?

b. How many times as tall as the actual tower is the model?

4. PUPPIES Meredith's new Pomeranian puppy is 7 inches tall and 9 inches long. She wants to make a drawing of her new Pomeranian to put in her locker. If the sheet of paper she is using is 3 inches by 5 inches, find an appropriate scale factor for Meredith to use in her drawing.

5. MAPS Carlos makes a map of his neighborhood for a presentation. The scale of his map is 1 inch:125 feet.

a. How many feet do 4 inches represent on the map?

b. Carlos lives 250 feet away from Andrew. How many inches separate Carlos' home from Andrew's on the map?

c. During a practice run in front of his parents, Carlos realizes that his map is far too small. He decides to make his map 5 times as large. What would be the scale of the larger map?