

Just How Small Are General Tom Thumb's Boots?



These are the boots of General Tom Thumb, whose real name was Charles S. Stratton. He was a little person who never grew more than 3 feet 6 inches tall (107 cm). He was 5 years old and less than 2 feet tall (61 cm) when Barnum hired him as a stage performer. Charles was promoted as a "Man in Miniature" and quickly became a big star. He traveled all over the world and even got to meet Queen Victoria in England!

The Barnum Museum has several pairs of boots worn by Charles. This pair was worn when he was a child because they are the smallest of the boots. To show how really small they are, a penny was put next to them for scale. **Scale** is a way to compare the size of something with an object that you already know.

Let's try this activity to see how big or small General Tom Thumb's boots are compared to your own shoes!

You will need a:

1. Ruler
2. Handful of pennies
3. Pencil, and
4. Piece of paper



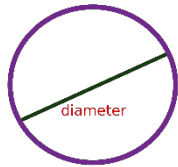
1. Using this photo of the boots, **estimate** how many pennies long, from heel to toe, you think General Tom Thumb's boots are. *To estimate means to make a guess* so it does not have to be exact. Write your answer here

_____.

2. Measure the diameter of a penny with a ruler and write the measurement here _____.

(The **diameter** is the length across a circle. You can use either inches or millimeters.)

Hint: .75 in or 19.05 mm



3. Now, multiply the diameter of the penny _____ X your estimated number of pennies long _____ = _____ and that equals the length of General Tom Thumb's boot.

4. For scale, take one of your shoes and measure from the toes to the heel with pennies, just like the picture above. **Count** how many pennies it takes. Write your answer here _____.

5. Multiply that number of pennies _____ X the diameter of a penny _____ = _____ and that equals the length of your shoe.

6. To compare the two, take the length of your shoe and **divide** it by the length of General Tom Thumb's boot. Your shoe _____ ÷ General Tom Thumb's boot _____ = equals how many of his boots "fit" into the length of your shoe _____.

7. Do you want to see what this difference looks like? Draw these two lengths next to each other on a piece of paper. Bet your shoe size is twice as long as General Tom Thumb's!