

Name \_\_\_\_\_

Date \_\_\_\_\_

**Using Density in Real-life Situations - Step-by-Step Lesson**

A big theater in New York has 1.3 million square feet. At the last show a band named SuperKron surveyed the theater to make sure there wasn't overcrowding.

They found the population density to be 0.015 people per square foot. This included all people in the building.

How many total people attended the theater on that day?

**Explanation:**

$$\text{Population Density} = \frac{\# \text{ of people}}{\text{Square feet}}$$

After input the numbers that we have

$$0.015 = \frac{X}{1,300,000 \text{ square feet}}$$

$$(0.015)(1,300,000) = X$$

$$X = 19500 \text{ people}$$

Total 19500 people attended theater on that day.

