

Name _____

Date _____

Area and Circumference of a Circle - Step-by-Step Lesson

Julia's Circle Problem:

Julia builds a mini round table for her sister. She wants to put a red table cloth on the table. If the table is 8 feet in diameter, how many square feet of red table cloth will she need to buy to cover the table circle? Use 3.14 for pi.



Explanation:

We need to calculate the area of the circle:

$$\text{Area of circle} = \pi r^2$$

$$\text{We know } \pi = 3.14$$

We need to find the radius. We can use: $D = 2 \times r$

$$\text{Diameter} = 8 \qquad \text{radius} = ?$$

$$8 = 2 \times r$$

$$r = 8 \div 2$$

$$r = 4$$

$$\text{Area of circle} = \pi r^2$$

$$\text{Area of circle} = 3.14 \times 4 \times 4$$

$$\text{Area of circle} = 50.24 \text{ Square Feet}$$

