

LESSON

Geometry Lab Recording Sheet p. 637

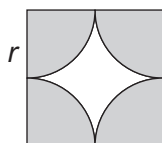
9-6 Use Geometry Probability to Estimate π

Try This

1. How close is your result to π ? _____

Average the results of the entire class to get a more accurate estimate.

2. In order for a penny to touch or cover an intersection, the center of the penny can land anywhere in the shaded area.



a. Find the area of the shaded region. (Hint: Each corner part is one fourth of the circle. Put the four corner parts together to form a circle with radius r .)

b. Find the area of the square.

c. Write the expressions as a ratio and simplify to determine the probability of the center of the penny landing in the shaded area.

3. Explain why the formula in the activity can be used to estimate π .
