Lesson 8.5 Assignment Name:_____

Use the Circle Area Conjecture to solve for the unknown measures in Exercises 1-8. Leave your answers in terms of $\pi$, unless the problem asks for an approximation.

1) If $r = 3$ in., $A =$_____

2) If $r = 7$ cm, $A =$_____

3) If $r = 0.5$ m, $A \approx$_____

4) If $A = 9\pi$ cm$^2$, $r =$_____

5) If $A = 3\pi$ in$^2$, $r =$_____

6) If $A = 0.785$ m$^2$, $r \approx$_____

7) If $C = 12\pi$ in., $A =$_____

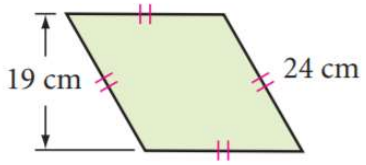
8) If $C = 314$ m, $A \approx$_____

9) The rotating sprinkler arms in the photo are all 16 meters long. What is the area of each circular farm? Express your answer to the nearest square meter.

10) A small college TV station can broadcast its programming to household within a radius of 60 kilometers. How many square kilometers of viewing area does the station reach? Express your answer to the nearest square kilometer.

11) Sampson's dog, Cecil, is tied to a post by a chain 7 meters long. How much play area does Cecil have? Express your answer to the nearest square meter.

12) $A =$_____




13) $A =$_____