

11.2 Areas of Circles & Sectors CYU

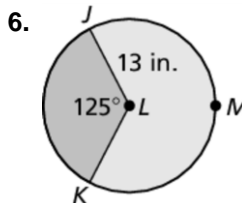
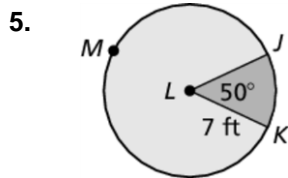
Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
H Use when you could do it alone with a little help from teacher or peer
G Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Area of circles	1	2	
Population Density	3	4	
Area of sectors	5	6, 7	8
Area of composite shapes	9		
Area of shaded regions	10	11	13 - 18
Real-World Application		12	

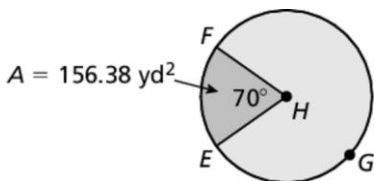
Find the indicated measure. Show the set up to earn full credit. Use appropriate units. Leave your answer exact and rounded to the thousandths.

- radius of a circle with an area of 1017.9 square meters
- diameter of a circle with an area of 707 square inches
- About 1.2 million people live in a region with a 6-mile radius. Find the population density in people per square mile.
- A region with a 15-mile diameter has a population density of about 5000 people per square mile. Find the number of people who live in the region.

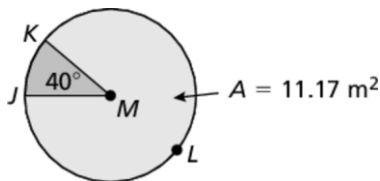
Find the areas of the sectors formed by $\angle JLK$. Show the set up to earn full credit. Use appropriate units. Leave your answer exact and rounded to the thousandths.



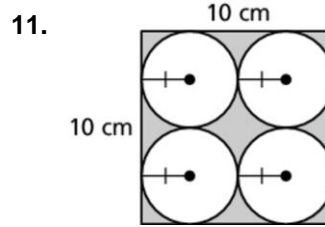
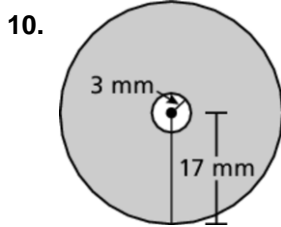
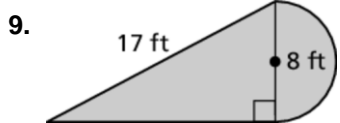
7. Find the area of $\odot H$.



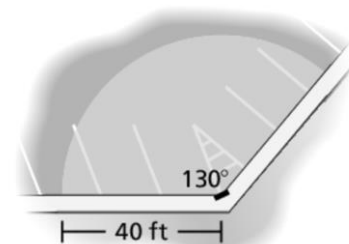
8. Find the area of $\odot M$.



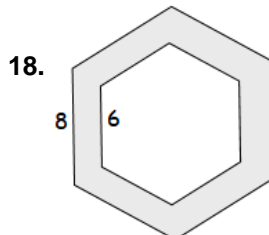
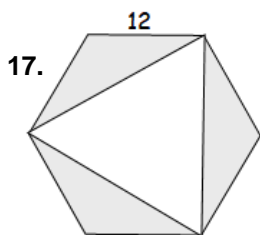
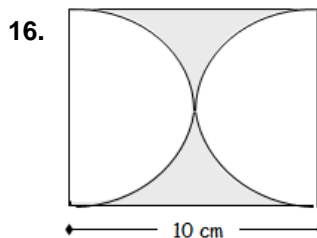
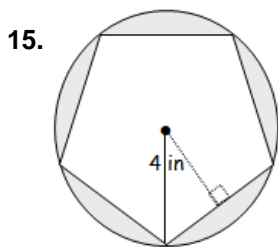
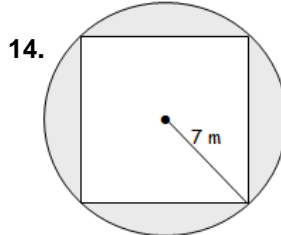
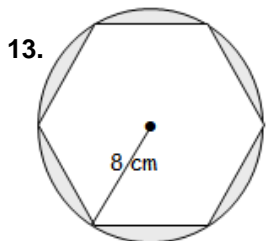
Find the area of the shaded region. Show the set up to earn full credit. Use appropriate units. Leave your answer exact and rounded to the thousandths.



12. The diagram shows the coverage of a security camera outside a building. A new security camera is installed in the same position that doubles the radius of the coverage area. How does this affect the coverage area? Explain.



Find the area of each shaded region. Show the set up to earn full credit. Use appropriate units. Leave your answer exact and rounded to the thousandths.



CYU Reflection: *How far can you go: basic, intermediate, or advanced?*

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

