

11.1 Circumference & Arc Length 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

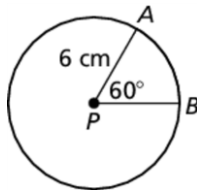
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Circumference	1	2, 8, 9	3
Real World Application			4, 12
Arc Length	5, 6, 7		4
Perimeter of composite figures		8, 9	
Converting angle measures	10, 11		
Revolutions			12

Find the indicated measure. Draw and label your image.

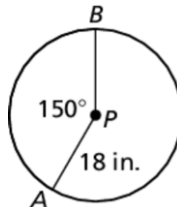
- radius of a circle with a circumference of 42π meters
- circumference of a circle with a diameter of 15 inches
- diameter of a circle with circumference 39 centimeters
- Maple trees suitable for tapping for syrup should be at least 1.5 feet in diameter. You wrap a rope around a tree trunk, then measure the length of the rope needed to wrap one time around the trunk. This length is 4 feet 2 inches. Explain how you can use this length to determine whether the tree is suitable for tapping.

Find the arc length of **AB**.

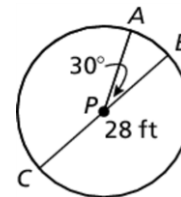
5.



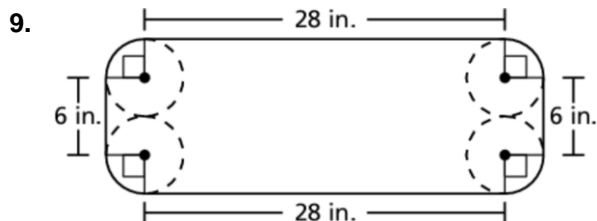
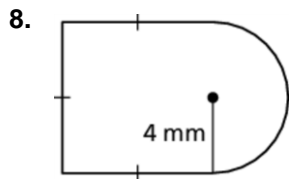
6.



7.



Find the perimeter of the region. Show set up to earn full credit. Use appropriate units and leave answers exact.



Convert the angle measure. Use appropriate units and leave answers exact.

10. Convert 60° to radians.

11. Convert $\frac{5\pi}{4}$ radians to degrees.

12. A carousel has a diameter of 50 feet. To the nearest foot, how far does a child seated near the outer edge travel when the carousel makes 8 revolutions?



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.

