Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_\_

**8.1A Circles and Circumference\_Classwork**

*Objective: find radius and diameter, find the circumferences of circles*

*CC.SS.7.G.4; MP8 Look for and Express Regularity in Repeated Reasoning.* HW: 8.1A page 321 #1-11 ALL

A circle is the set of all points in a plane that are the same distance from a point called the center.



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| 1. Finding a Radius and a Diameter: The diameter of a circle is 20 feet. Find the radius.

 | 1. Finding a Radius and a Diameter: The radius of a circle is 7 meters. Find the diameter.

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| **CIRCUMFERENCE of A CIRCLE**The circumference C of a circle is equal to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It is another word for perimeter.**FORMULA**Circumference: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Finding Circumferences of Circles: Find the circumference of the flying disc with a radius of 5 in. Use 3.14 for $π$

 | 1. Finding Circumferences of Circles: Find the circumference of the watch face with a diameter of 28 mm. Use 3.14 for $π$.

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| 1. Consider the circles A, B, C, and D.

1. Without calculating, which circle has the greatest circumference? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Without calculating, which circle has the least circumference? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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| 1. Estimate the diameter given a circumference of 28.26 meters.
 | 1. Estimate the diameter given a circumference of 12.56 inches.
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| 1. Estimate the radius given a circumference of 28.26 meters.
 | 1. Estimate the radius given a circumference of 12.56 inches.
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| 1. A circular sinkhole has a circumference of 75.36 meters. A week later, it has a circumference of 150.42 meters.
2. Estimate the diameter of the sinkhole each week. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. How many times greater is the diameter of the sinkhole now compared to the previous week?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**PRACTICE PROBLEMS:** draw out the diagram, show your work, round your answer to the nearest tenth, use 3.14 for , and include unit to the answer

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| 1. Mr. Sam is putting a trim around the edge of a circular merry-go-around that has a diameter of 15 feet. How much trim does he needs to buy?

 | 1. Find the circumference of a pizza with a radius of 6 inches.

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| 1. Find the circumference

 | 1. Find the circumference

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Resources:

<https://www.lcps.org/cms/lib4/VA01000195/Centricity/Domain/10878/AreaCircNotesandHW.pdf>