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

**13.1A NOTES – Circumference of Circles and Perimeter of Semicircles**

*Objective: use inductive reasoning to understand the formula for the circumference of a circle*

CC.SS.7.G.4\_MP4 Model with Mathematics

HW: 13.1A pg 553\_#9-11, 13-19, 21



Circumference of Circles formula: \_\_\_\_\_\_\_\_\_\_\_\_ Perimeter of Semi-circle formula: \_\_\_\_\_\_\_\_\_\_\_\_

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*Use 3.14 for pi*

|  |  |
| --- | --- |
| 1. Find the circumference of the circle.

TA: S:\mscc7wb03.01\Red Production\Red Record and Practice Journal\Art\08\mscc7_rpj_0801_10.eps,11/5/2012 9:43:35 AM replaced: 7/31/2016 7:29:31 PM | 1. Find the circumference of the circle.

TA: S:\mscc7wb03.01\Red Production\Red Record and Practice Journal\Art\08\mscc7_rpj_0801_11.eps,11/5/2012 9:44:52 AM replaced: 7/31/2016 7:29:31 PM |
| 1. Find the circumference of the circle.

 | 1. Find the circumference of the circle.
2. TA: S:\mscc7wb03.01\Red Production\Red Record and Practice Journal\Art\08\mscc7_rpj_0801_14.eps,11/5/2012 9:46:46 AM replaced: 7/31/2016 7:29:33 PM
 |
| 1. Find the perimeter of the semicircle.

TA: S:\mscc7wb03.01\Red Production\Red Record and Practice Journal\Art\08\mscc7_rpj_0801_15.eps,11/5/2012 9:47:23 AM replaced: 7/31/2016 7:29:33 PM | 1. Find the perimeter of the semicircle.

TA: S:\mscc7wb03.01\Red Production\Red Record and Practice Journal\Art\08\mscc7_rpj_0801_16.eps,11/5/2012 9:47:57 AM replaced: 7/31/2016 7:29:33 PM |
| 1. Find the perimeter of the semicircular region. Round answer to the nearest tenth and use 3.14 for pi.

 | 1. A wire is bent to form four semicircles. How long is the wire? Round to the nearest tenth and use 3.14 for pi.

**24 cm****24 cm** |

BACK 🡪

**EXAMPLE PROBLEMS**

|  |
| --- |
| **EXAMPLE 1:** Consider the circles A, B, C, and D. **45 in** **2.5 ft****9 in****4 ft**1. Without calculating, which circle has the greatest circumference? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Without calculating, which circle has the least circumference? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 |
| **EXAMPLE 2:** A circular sinkhole has a circumference of 62.8 meters. A week later, it has a circumference of 188.4 meters.1. Estimate the diameter of the sinkhole each week. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. How many times greater is the diameter of the sinkhole now compared to the previous week?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **EXAMPLE 3:** Find the circumference of both circles. Round answer to the nearest tenth and use 3.14 for pi.Image result for two circles inside each other

|  |  |
| --- | --- |
| Small Circle | Big Circle |

3 ft1.5 ft |

**PRACTICE PROBLEMS**

|  |  |
| --- | --- |
| 1. Estimate the diameter given a circumference of 28.26 meters.
 | 1. Estimate the diameter given a circumference of 12.56 inches.
 |
| 1. Estimate the radius given a circumference of 28.26 meters.
 | 1. Estimate the radius given a circumference of 12.56 inches.
 |