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

**8.1B NOTES – Volumes of Cylinders**

*Objective: find the volumes of cylinders; find the heights of cylinders given the volumes; solve real-life problems. CC.SS.8.G.9 HW: 8.1B Homework (handout)*

*\*\* Start with warm up on the back\*\**

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| FORMULA FOR VOLUME OF A CYLINDER: $V= πr^{2}h$ |

**EXAMPLES. Find the missing dimension of the cylinder given the volume**.

**Round to the nearest hundredth.**

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| 1. Find the height of the cylinder with the given volume and diameter.  |
| 2. The volume of a cylinder is $405π cm^{3}$ and the radius is 9cm. Find the height. |
| 3. Find the radius of a cylinder with a volume of 7,065 ft3 and a height of 10 ft.  |

**ON YOUR OWN**

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| 1. Find the height for the given diameter and volume. *Round to the nearest hundredth.*

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**BACK 🡪**

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| 1. Find the height for the given diameter and volume. *Round to the nearest hundredth.*

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| 1. Find the height of a cylinder with volume of$324π$ cm3 and radius of **6** cm. *Round to the nearest hundredth.*
 |
| 1. Find the radius of a cylinder with a volume of 3,768 ft3 and a height of 12 ft. *Round to the nearest hundredth.*
 |
| 1. Find the radius. Round your answer to the nearest whole number.

$$Volume=8,000π cm^{3}$$**40 cm** |