Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table# \_\_\_\_ Per\_\_\_ Date\_\_\_\_\_\_\_

**Follow Up to 8.1B\_Classwork**

**EFFECTS ON VOLUME BY DOUBLING THE DIAMETER (8.G.9)**

*If the diameter of a cylinder is doubled, and the height stays the same, does the volume of a cylinder double too? If not, what does it do? Create examples of this to test it out. Explain if the volume doubles and why or explain what it does based on the examples you have created. You will need to create at least 3 examples to make a case.*

Example 1

|  |  |
| --- | --- |
| Cylinder 1:  Diameter \_\_\_\_\_\_\_; Height \_\_\_\_\_\_\_ | Cylinder 2 (Hint: Diameter of Cylinder 2 should be twice as much as Diameter of Cylinder 1. Height of both should be the same.)  Diameter \_\_\_\_\_\_\_; Height \_\_\_\_\_\_\_ |

Example 2

|  |  |
| --- | --- |
| Cylinder 1 | Cylinder 2 |

Example 3

|  |  |
| --- | --- |
| Cylinder 1 | Cylinder 2 |

CONCLUSION. Use the examples you created above to help you write a clear, well written explanation.

|  |
| --- |
| If the diameter of a cylinder is doubled, and the height stays the same, does the volume of a cylinder double too? If not, what does it do? |