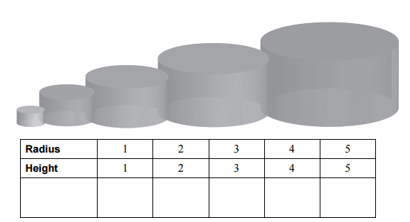
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per: \_\_\_\_ Table#\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_

**8.4C Volumes of Similar Solids\_Classwork**

*Objective: Use properties of similar solids to find missing measures. Understand relationship between volumes of similar solids.*

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| --- |
| **Warm-Up**  Determine whether the solids are similar |



B

A

C

D

E

**Volume**

Compare the radius of cylinder A to all of the other cylinders (B, C, D & E). Set up a proportion for each one. Simplify any ratios that can be simplified. Are the two ratios equal? Is there a way to make them equal?

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| --- | --- |
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When two solids are similar, the ratio of their volumes is equal to the \_\_\_\_\_\_\_\_\_ of the ratio of their corresponding linear measures.

**Watch and copy the Big Ideas Math Video 8.4, Example 4 and Example 4 (p. 358)**

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| The cylinders are similar. Find the volume of Cylinder J. Round your answer to the nearest tenth. |
| Example 4 (p. 358)  The dimensions of the touch tank at the aquarium are doubled. What is the volume of the new touch tank? |

**ON YOUR OWN #5 and 6 (p. 358)**

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| **The solids are similar. Find the volume of the small solid. Round your answer to the nearest tenth.** |
| **6. The solids are similar. Find the volume of the big solid. Round your answer to the nearest tenth.** |

**HW: (8.4C) p. 360 #10 -15 (ODD Solutions on p. A35)**

**EVEN SOLUTIONS**: 10) 756 m212) 196 mm3 14) Student answers will vary; V = 500 in3