


Name \_\_\_\_\_



Date \_\_\_\_\_

## Volume

Complete.

<p>1. If you have three 5-in by 5-in x 5-in aluminum cubes and superglue them together in a row, what is the surface area of the resulting shape made by the three cubes?</p>	<p>2. A pillar from an ancient city was found buried in the ground. It had a cross-sectional shape like that shown in the figure. If the area of the cross section is sixteen and nine hundredths square meters, and the pillar was fifteen and four tenths meters tall, what was the total volume of stone contained by the pillar?</p>  <p>Enter answers in text boxes.</p>
<p>3. If a cube with a 5-in side length is sliced in half what is the surface area of the two pieces?</p>	<p>4. A water tank has been purchased for the farm. It will be used to water cattle. It is an oval shaped metal container that is 3.1 feet tall. The area of the bottom of the tank is 7.3 square feet. If the cattle drink one hundred ninety-eight cubic feet of water a day, how many times per day will the tank have to be filled?</p>
<p>5. Captain Howard had his crew paint the smokestack on his ship the Sea Snail. The smokestack is shaped like a cylinder and is 41 feet 8 inches tall. The radius of the smokestack's base is eight feet. What is the surface area of the smokestack?</p>	<p>6. Mr. Bloop has a cylindrical water tank on his farm. It is twelve feet long and 1 foot 3 inches in diameter. Water flows out a valve in the bottom of the tank at a rate of 2.5 cubic feet per minute. At that rate, how long will it take to empty the tank when the tank is full?</p>