

Name _____



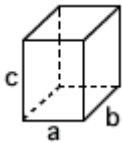

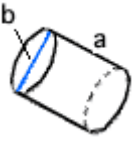
Date _____

Volume and Surface Area

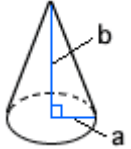
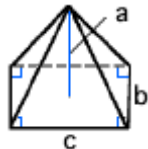
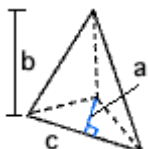
Fill in the missing values for a rectangular prism.

<p>1. length 13 width 10 height _____ surface area _____ volume 650</p>	<p>2. length 6 width _____ height 9 surface area 438 volume _____</p>	<p>3. length 5.6 width _____ height 11.2 surface area _____ volume 878.08</p>
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Find the volume of each solid to the nearest tenth. (use $\pi = 3.14$)

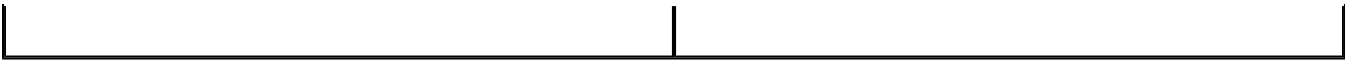
<p>4.  $a = 30$ ft $b = 29$ ft $c = 70$ ft</p>	<p>5.  $a = 1.8$ yd $b = 61.3$ yd</p>	<p>6.  $a = 2$ cm $b = 18$ cm</p>
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Find the volume of each solid to the nearest tenth. (use $\pi = 3.14$)


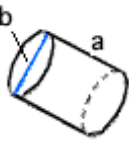
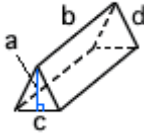
<p>7.  $a = 7.7$ ft $b = 8.4$ ft</p>	<p>8.  $a = 6$ cm $b = 6$ cm $c = 5$ cm</p>	<p>9.  $a = 3$ m $b = 6$ m $c = 8$ m</p>
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Find the volume of each solid to the nearest tenth. (use $\pi = 3.14$)


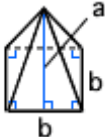

<p>10. cylinder: radius = 12 yd, height = 13 yd</p>	<p>11. cylinder: diameter = 15 km, height = 6 km</p>
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Find the surface area of each solid to the nearest tenth. (use $\pi = 3.14$)

<p>12.</p>  <p>$a = 38 \text{ cm}$ $b = 9 \text{ cm}$</p>	<p>13.</p>  <p>$a = 34 \text{ mm}$ $b = 4 \text{ mm}$</p>	<p>14.</p>  <p>$a = 40 \text{ in}$ $b = 52 \text{ in}$ $c = 18 \text{ in}$ $d = 41 \text{ in}$</p>
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Find the surface area of each solid to the nearest tenth. (use $\pi = 3.14$)

<p>15.</p>  <p>$a = 8 \text{ mm}$</p>	<p>16.</p>  <p>$a = 5.7 \text{ in}$ $b = 16 \text{ in}$ $c = 16 \text{ in}$</p>	<p>17.</p>  <p>$a = 2.57 \text{ cm}$</p>
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Complete.

<p>18. 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 2.5 feet tall. The area of the bottom of the tank is 10.2 square feet. If the cattle drink one hundred ninety-six cubic feet of water a day, how many times per day will the tank have to be filled?</p>	<p>19. 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 6 inches tall. The radius of the smokestack's base is five feet. What is the surface area of the smokestack?</p>
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