

Propane Tanks	Rubric	
	Points	Section points
<p>Gives correct answers and shows correct reasoning such as:</p> <p>The approximate value for the radius of the new tank is 4 feet.</p> <p>For the existing tank</p> <p>The volume of the cylinder is 283 or 90π</p> <p>The volume of the sphere is 113 or 36π</p> <p>The total volume is 396 or 126π</p> <p>For the new tank the volume $V = \pi r^2 h + 4\pi r^3/3 = 10\pi r^2 + 4\pi r^3/3 = 2 \times 126\pi$</p> <p>$10r^2 + 4r^3/3 = 252$</p> <p>Tries different values for r</p> <p>When $r = 4$, $V = 245.3$</p> <p>When $r = 5$, $V = 416.6$</p> <p>When $r = 4.1$, $V = 259.9$</p> <p>Award process points if numerical errors are made.</p>	<p>1</p> <p>2</p> <p>2</p> <p>1</p> <p>2</p> <p>2</p>	<p>10</p>
Total Points		10

