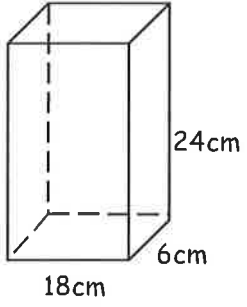
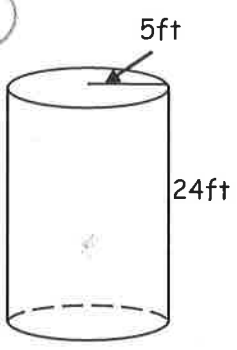
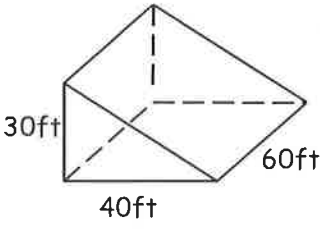
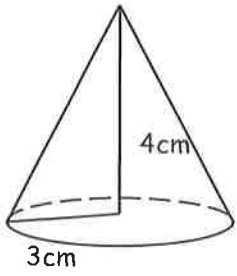
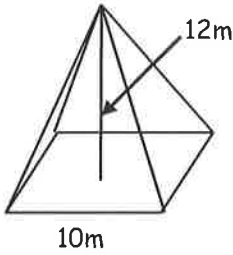
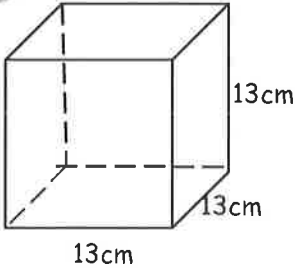
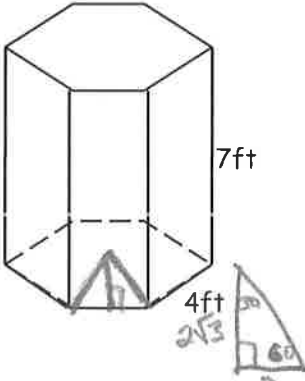
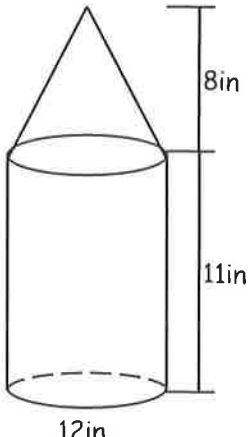


Directions: Find the total area and volume of each shape. Show all work. Leave all answers in π form and/or simplified radical form.

	Total Area	Volume
<p>1)</p> 	$TA = LA + 2B$ $TA = (48 \cdot 24) + 2(108)$ $1152 + 216$ $TA = 1368 \text{ cm}^2$	$V = 108(24)$ $V = 2592 \text{ cm}^3$
<p>2)</p> 	$TA = LA + 2(B)$ $TA = 2\pi \cdot 5 \cdot 24 + 2\pi 5^2$ $TA = 240\pi + 50\pi$ $TA = 290\pi \text{ ft}^2$	$V = \pi \cdot 5^2 \cdot 24$ $V = 600\pi \text{ ft}^3$
<p>3)</p> 	$TA = LA + 2B$ $TA = (120 \cdot 60) + 2(600)$ $7200 + 1200$ 8400 ft^2	$V = B(h)$ $V = 600(60)$ $V = 36,000 \text{ ft}^3$
<p>4)</p> 		

Geometry/Trig 2
12.1 - 12.3 worksheet

	Total Area	Volume
<p>5)</p> 		
<p>6)</p> 	$TA = SA + 2B$ $TA = (52 \cdot 13) + 2(169)$ $676 + 338$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> 1014 cm^2 </div>	$V = Bh$ $V = 169(13)$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> $V = 2197 \text{ cm}^3$ </div>
<p>7) The base is a regular hexagon.</p> 	$TA = SA + 2B$ $TA = (24 \cdot 7) + 2 \cdot \frac{1}{2} (2\sqrt{3})(24)$ $168 + 48\sqrt{3}$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> $168 + 48\sqrt{3} \text{ ft}^2$ </div>	$V = Bh$ $V = 24\sqrt{3} \cdot 7$ <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> $V = 168\sqrt{3} \text{ ft}^3$ </div>
<p>8)</p> 	<p>NOTE: Do not add in the base of the cone when calculating the T.A, nor the top base of the cylinder. Imagine the solid is completely hollow.</p>	