

Bellwork, Thursday, May 29, 2014

Find the Volume of each prism or cylinder to the nearest tenth unless noted otherwise. Include units in your answer if they are given in the problem.

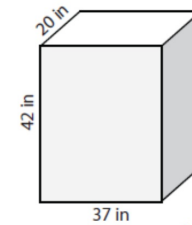
Volume of a Prism:

$$V = Bh$$

Volume of a Cylinder:

$$V = Bh = \pi r^2 h$$

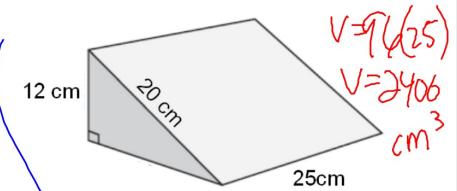
### 1. Rectangular Prism



$$V = 740(42) = 31,080 \text{ in}^3$$

$$A = B = (37)(20) = 740$$

### 2. Right Triangular Prism



$$V = 9(25) = 225 \text{ cm}^3$$

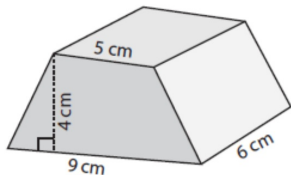
$$V = 2406 \text{ cm}^3$$

$$h = 12$$

$$b = 16$$

$$\frac{1}{2}(12)(16) = 96$$

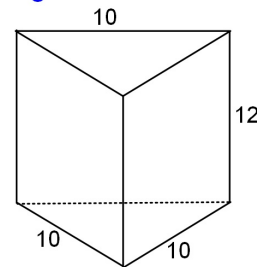
### 3. Trapezoidal Prism



$$V = 28(6) = 168 \text{ cm}^3$$

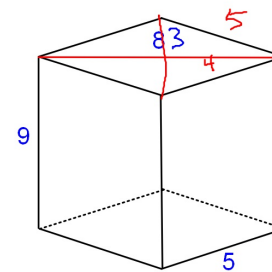
$$B = \frac{1}{2}(5+9)4 = 28$$

### 4. Triangular Prism



$$V = \frac{1}{2}(10)(12)(10) = 59.4$$

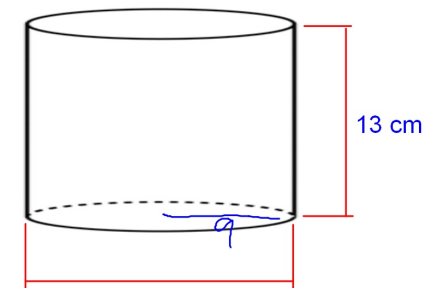
### 5. Rhomboidal Prism



$$B = \frac{1}{2}(8)(6) = 24$$

$$V = (24)(9) = 216$$

### 6. Cylinder. Give your answer in terms of $\pi$



$$V = \pi(9)^2(13) = 1053\pi \text{ cm}^3$$