$\qquad$

| Cylinder |  | Cone | Ratio of Volumes <br> Cone : Cylinder |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| 1 | Length of Radius: 6 cm <br> Height of Cylinder: 10 cm <br> Volume: | Length of Radius: 6 cm <br> Height of Cone: 10 cm <br> Volume: $376.8 \mathrm{~cm}^{3}$ |  |
| 2 | Length of Radius: 9 in <br> Height of Cylinder: 15 in <br> Volume: | Length of Radius: 9 in <br> Height of Cone: 15 in <br> Volume: 1271.7 in |  |
| 3 | Length of Radius: 18 ft <br> Height of Cylinder: 7 ft <br> Volume: | Length of Radius: 18 ft <br> Height of Cone: 7 ft <br> Volume: 2373.84 ft |  |

Looking at the ratios you wrote for the volume of the cone to the volume of the cylinder, what conclusions can you make?

| Volume of a Cylinder | Volume of a Cone |
| :---: | :---: |
|  |  |

## Using the formula, find the volume of the cones from above. Use 3.14 for $\pi$

| l) | 2) | $3)$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |

(II)

Pause the video and try the problems on your own! Round to the nearest tenth if necessary. Then press play and check your answers with a color pen.

3)


