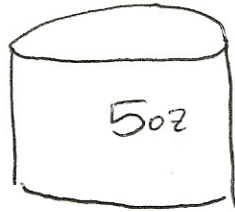


① I guess the tall soda.

You Pour, I Choose

②



③ measurements of diameters
" " heights

$$\begin{aligned} & \frac{10(5.5)^2}{\pi r^2 h} & \pi r^2 h \\ & = \pi (5.5/2)^2 \cdot 10 & \pi (1/2)^2 \cdot 3 \\ & = 237.6 \text{ cm}^3 & 115.5 \text{ cm}^3 \\ & \times .0338140227 \text{ oz/cm}^3 \end{aligned}$$

8 oz	3.9 oz
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④ I'd rather double the radius. That will quadruple the volume. Doubling the height will just double the volume.

$$\begin{aligned} V & \Rightarrow \pi r^2 (2h) \\ & = 2\pi r^2 h \\ & = \boxed{2V} \end{aligned}$$

$$\begin{aligned} V & \Rightarrow \pi (2r)^2 h \\ & = \pi (4r^2) h \\ & = 4\pi r^2 h \\ & = \boxed{4V} \end{aligned}$$