Answer to Question \#50575, Chemistry, Other

A bottling plant has 164,900 bottles with a capacity of $355 \mathrm{~mL}, 123,000$ caps, and $31,400 \mathrm{~L}$ of beverage. (a) How many bottles can be filled and capped?

## Solution:

$$
\begin{gathered}
n(\text { bottles })=\frac{V(\text { total })}{V(\text { in one bottle })} \\
n(\text { bottles })=\frac{31400 \mathrm{~L}}{0.355 \frac{L}{\text { bottle }}}=88450.7042 \text { bottles }
\end{gathered}
$$

## Answer: <br> 88450 bottles can be filled and capped.

