Kate Middleton came to America with 54 pounds (£) and 37 euros (€). She would like to buy a can of caviar worth $150. Today, we have:

\[
\begin{align*}
$1.00 & = £0.612 & €1.00 & = $1.362
\end{align*}
\]

a.) Does she have enough money?

\[
\begin{align*}
\text{Kate has £54, which converts to $88.24 as follows: } & \quad 54 \times \frac{1}{0.612} = 88.24. \\
\text{She also has €37, which converts to $50.40 as follows: } & \quad 37 \times \frac{1.362}{1} = 50.40. \\
\text{So, in total, she has $88.24 + $50.40 = $138.64. Since $138.64 < $150, she does not have enough money.}
\end{align*}
\]

b.) If so, how much excess does she have? If not, how much is she short by?

\[
\begin{align*}
\text{She is short by $150 - $138.64 = $11.36.}
\end{align*}
\]