1

$$SE = \frac{S_x}{\sqrt{n}}$$

2

$$\begin{aligned}
\mu = &\text{ time my friend took to complete breath of the wild} \\
H_0 : \mu &= 175.33 \\
H_A : \mu &\neq 175.33 \\
z(0.86) &= qnorm(0.93) = 1.476 \\
CI_{86\%}(175.33, \frac{40}{\sqrt{180}} \approx 3.38) &= 175.33 \pm 1.476 * 3.38 \\
&= [170.34, 180.32]
\end{aligned}$$

Since $mu = 150 \notin [170.34, 180.32]$, we reject the null hypothesis. I am 86% confident that my friend took different amount of time than all other players to complete breath of the wild.

3