Learning Outcomes: Hypothesis Test For One-Sample Mean with $\sigma^2$ known

1. Given a problem situation, be able to state appropriate null and alternative hypotheses.
   1.1. Appropriate means that you know whether it should be one or two sided.
   1.2. And which should be null, which alternative.
2. Be able to calculate a p-value.
3. Be able to interpret a p-value.
4. Be able to state the relationship between a CI for $\mu$ and a test about $\mu$ (one or two sided).
5. Perform a hypothesis test and state your conclusion with a sentence.
   5.1. Test via p-value
   5.2. Test via CI

Terms you should know

1. Significance level
2. P-value
3. Null hypothesis
4. Alternative hypothesis