12.2 Hypothesis Testing for \( p \)

Example:
Duck hunting in populated areas faces opposition on the basis of safety and environmental issues. The San Luis Obispo telegram-Tribune reported the results of a survey to assess public opinion regarding duck hunting on Morro Bay in California. A random sample of 750 local residents included 560 who strongly opposed hunting on the bay.

(a) Does this sample provide sufficient evidence to conclude that the majority of local residents oppose hunting on Morro Bay? Use \( \alpha = 0.05 \).

\[
\begin{align*}
\text{x} &= \text{n} = \\
\text{H}_0 : \quad \text{H}_a :
\end{align*}
\]

Assuming large samples, the test statistics to use is:

\[
Z =
\]

What is \( \hat{p} \)?

\[
\hat{p} =
\]

\[
\rightarrow Z =
\]

Conclusion:

\( \text{H}_0 \). There is evidence to indicate that the majority of local residents...

(b) What is the p-value associated with this test?

p-value =

(c) Make your conclusion based on the p-value of the test.

Since p-value =