Lab Report: Hypothesis Testing – Two Population Means
Name(s):

**Hypotheses**
- State the claim that you are testing.
  -
- State the null and alternative hypotheses.
  - $H_0$:
  - $H_a$:
- Is this a right-tailed, left-tailed, or two-tailed test?
  -
- Define the random variable for this test.
  -

**Hypothesis Test—Known $\sigma$**

**Hypothesis Test—Unknown $\sigma$**

**Interpretation**

**Decisions on Null Hypothesis**

<table>
<thead>
<tr>
<th>$\sigma$</th>
<th>$\alpha$</th>
<th>p-value</th>
<th>decision (reject or do not reject $H_0$)</th>
<th>reason for decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>0.05</td>
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</tbody>
</table>

**Conclusions**

<table>
<thead>
<tr>
<th>$\sigma$</th>
<th>Conclusion</th>
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<tbody>
<tr>
<td>Known</td>
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<tr>
<td>Unknown</td>
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Discussion

1.

2.