(8 points : 8 minutes)

1. You make wood products with glue to fasten joints together. The manufacturer of a new glue formula claims that wood joints using the new glue can hold on average 10 pounds more than joints that use the old formula. You make 14 joints using the new glue and 11 joints using the old glue, then you measure how much weight each joint can hold. Use the results below to test the glue manufacturer's claim. (Use $\alpha=0.10$ for the test and assume that variation is about the same for both glues.)

|  | Weight Held |  |
| :---: | ---: | ---: |
|  | New <br> Glue | Old <br> Glue |
| $\bar{x}=$ | 201.0 | 178.4 |
| $\mathrm{~s}=$ | 10.3 | 9.0 |
| $\mathrm{n}=$ | 14 | 11 |

