$\qquad$ Pd $\qquad$
Show all necessary work and place your answers in/on the spaces provided.

## Athletic Scholarships.

A total of 23 Mifflin County High School students were admitted to Penn State University. Of those students, seven were offered athletic scholarships. The guidance department looked at the students' composite ACT scores (shown in the table), wondering if PSU might admit people with lower scores if they were also athletes. Assuming that the group of students is representative of students throughout the state, what do you think?

Test an appropriate hypothesis and state your conclusion.

| Composite ACT Scores |  |  |
| :---: | :---: | :---: |
| Non-athletes |  | Athletes |
| 25 | 21 | 22 |
| 22 | 27 | 21 |
| 19 | 29 | 24 |
| 25 | 26 | 27 |
| 24 | 30 | 19 |
| 25 | 27 | 23 |
| 24 | 26 | 17 |
| 23 | 23 |  |

