

# E X A M P L E

Twenty-one students at a large college undergo a standard test to measure their reaction time to a particular stimulus. The median reaction time in the population generally is believed to be 7.8seconds

The reaction times for this sample are:

|     |     |     |      |      |      |      |
|-----|-----|-----|------|------|------|------|
| 6.6 | 3.6 | 2.1 | 13.2 | 5.4  | 11.6 | 1.6  |
| 7.2 | 7.8 | 3.8 | 6.0  | 14.2 | 3.0  | 15.2 |
| 4.7 | 2.8 | 7.5 | 6.9  | 21.6 | 6.7  | 4.3  |

Use a sign test to test, at the 5% significance level, the hypothesis that the median reaction time is 7.8 seconds