

## Quiz 4A

**Name:**

**UAlbany Email:**

Closed book/notes. Scientific calculators only. You must show all work to receive full credit.

**Question 1 will consider the sample of size  $n = 7$  below.**

71                  72                  73                  74                  75                  75                  78

1. (6 pts.) Fill in the table below.

Lower Fence	Lower Quartile	Median	Upper Quartile	Upper Fence

**Questions 2 and 3 refer to the following. A data set of size  $n = 7799$  scores was collected from the Town of Colonie Golfers' Loop over calendar-years 2015-2023. A preliminary analysis shows that  $\bar{x} \approx 81.006$  and  $s \approx 5.658$ .**

2. (2 pts.) Assume that the data set is well-approximated by a normal curve. Then the central 99.7% of all scores lie in what interval?
3. (2 pts.) A member of the Town of Colonie Golfers' Loop has recorded a score of 75. Compute the  $z$  score for this observation. Round your answer to *three* decimal places.

### Formulas You may Need:

$$LF = LQ - 1.5IQR$$

$$UF = UQ + 1.5IQR$$

$$z = \frac{x - \bar{x}}{s} \quad (1)$$

Grade:                  /10