Lagunita is retiring and will shut down at 12 noon Pacific Time on March 31, 2020. A few courses may be open for self-enrollment for a limited time. We will continue to offer courses on other online learning platforms; visit http://online.stanford.edu.

Course > EDA: Examining Distributions > One Quantitative Variable: Measures of Spread - Boxplots > Extra Problems

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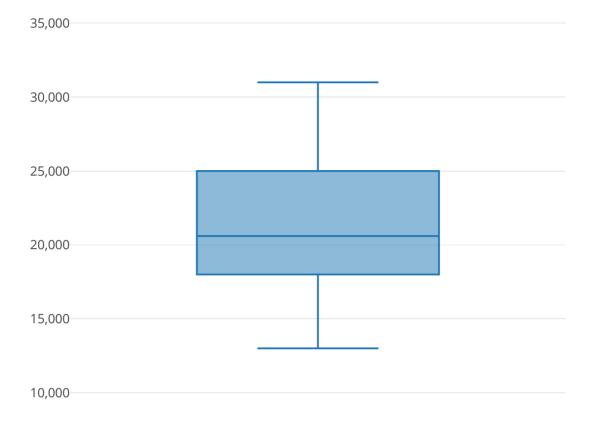
### **Extra Problems**

These extra questions are here to give you more practice if you feel you need it. No new concepts are introduced on this page. If you've "got it", go ahead and move on to the next page. If you'd like a little more practice, work through the questions below.

### Scenario: College Debt

The Web site www.kiplinger.com published the "Best Values in Public Colleges," saying they were determined by rankings based on data from more than 500 public four-year colleges and universities. Using out-of-state rankings that considered the academic quality, total out-of-state costs, and average costs after financial aid, the 50 best-rated colleges were selected. The boxplot pictured displays the average debt per graduate for these colleges.





EDIT CHART

# Question

1/1 point (graded)

What percentage of the graduates will have a debt greater than \$25,000?

19%25% ✓50%

○ 75%

O 81%

#### **Answer**

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Since \$25,000 is the third quartile (Q3), one-quarter of the graduates will have a debt greater than this amount.



## Question

1/1 point (graded)

50% of the debts owed are smaller than what amount?

\$18,000



\$22,000

\$25,000

### **Answer**

Correct:

50% of the debts are smaller than the median, which according to the boxplot is between 20,000 and 21,000.

Submit

## Question

1/1 point (graded)

Within which interval of debts would you expect to find the largest number of graduates?

13,000 - 17,000



21,000 - 25,000

25,000 - 29,000

All the intervals are equal

#### **Answer**

Correct:

Since 17,000 is below the first quartile and 21,000 is above the median, more than 25% of the debts are in this interval.



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