

Assignment: T4-68 Box Plots, Med, IR

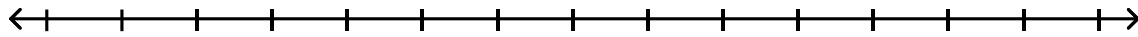
Use the following data sets and your calculator to complete the following:

Ages of kids at a party:

13, 14, 14, 13, 15, 15, 15, 16, 14, 7, 16, 19, 17, 15, 17, 15, 15, 14, 18

1. Min: Q_1 : Med: Q_3 : Max:

2. Make a box plot



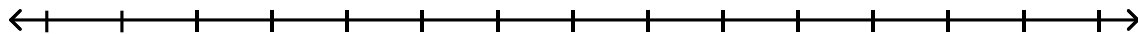
- 3. Are there any outliers?
- 4. What effect does the outlier have on the median?
- 5. What is the range?
- 6. What effect does the outlier have on the range?
- 7. What is the Interquartile Range (IQR)?
- 8. What effect does the outlier have on the IQR?

Ages of students in a college class:

18, 21, 24, 22, 19, 23, 18, 19, 20, 17, 23, 19, 18, 21, 22, 19, 19, 20, 21

9. Min: Q_1 : Med: Q_3 : Max:

10. Make a box plot



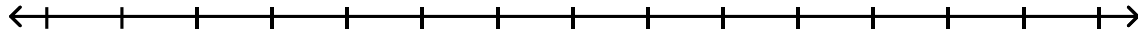
- 11. How does the median compare to the data set in #1? What does this tell you about the two data sets?
- 12. What is the range? How does it compare to the range in #5? What does this tell you about the two data sets?
- 13. What is the IQR? how does it compare to the IQR in # 7? What does this tell you about the two data sets?

The number of stories in the tall buildings that Ashley has visited:

88, 88, 110, 88, 80, 69, 102, 78, 70, 55, 12, 79, 85, 80, 100, 60, 90, 77, 55, 75

14. Min: Q_1 : Med: Q_3 : Max:

15. Make a box plot



16. Are there any outliers?

17. What effect does the outlier have on the median?

18. What is the range?

19. What effect does the outlier have on the range?

20. What is the Interquartile Range (IQR)?

21. What effect does the outlier have on the IQR?

Review: Solve for x:

22. $x - y + z$ for $x = 6$, $y = -3$, $z = 2$

23. $a - 2b + ab$ for $a = 3$, $b = -1$

24. $-x^2 - 2(x + 1)$ for $x = 3$

25. $c(3 - d) - c^2$ for $c = -3$, $d = 5$