

AP Statistics

Review Ch. 1 and Summer Packet Answers

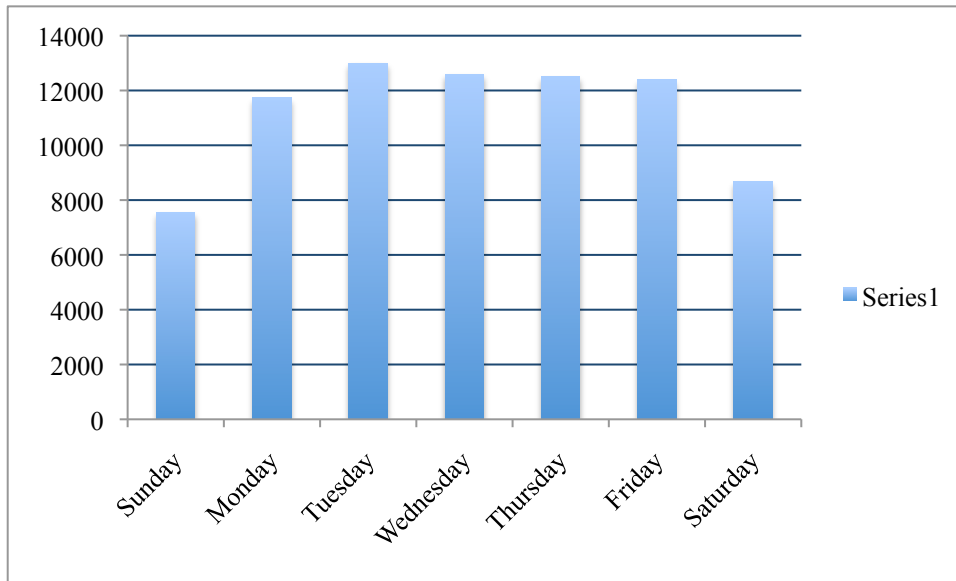
- 1. b            2. c            3. b            4. c            5. e            6. d
- 7. d            8. c            9. d            10. d           11. e           12. d
- 13. a           14. e           15. b           16. b           17. e           18. d

19.a. 5 roller coasters that opened in 2009

b. Categorical: Type, Design

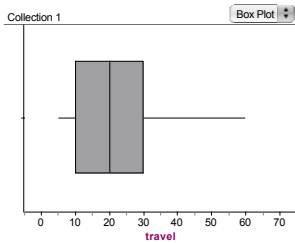
Quantitative: Height (in feet), Speed (in mph), Duration (in seconds)

20a.

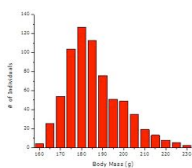


b. Many births are scheduled (C-section, inducement) and doctors will typically not schedule births on weekends.

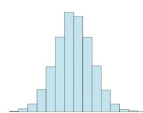
- 21. a. 22.47, 20      b. 55, 20      c. -20, 60      d. 15.23
- e.                      5, 10, 20, 30, 60



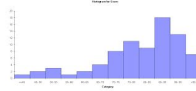
22. a.



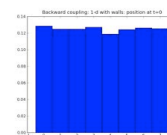
b.



c.



d.



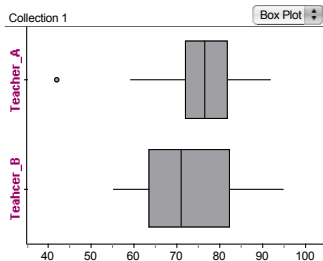


23. a. 9%                      b. 37%                      c. 15%                      d1. .0023                      2. .0187                      3. .6298

24a1. .4622                      2. .5042                      3. .1849                      4. .7815

25.a. .2488                      b. .3939

26.



b. Yes, there were outliers for Teacher A. The low boundary for outliers was 57, so 42 is an outlier.

c. While Teacher B has both a higher Q3 and the highest score of 95, this teacher's scores are also more spread out in the top 3 quartiles. However, Teacher A's top three quartiles start above the median of Teacher B. This means 75% of Teacher A's scores are above the value of 71% and only 50% of Teacher B's students are at or above this value. Teacher A appears to have better scores overall. Also, Teacher's A's students in the top 75% are tightly packed so there is also a stronger appearance of consistency in Teacher A's students.