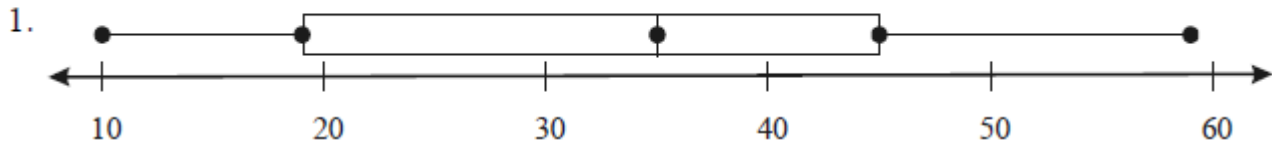


# EOC Review- Unit 4: Statistics

## Book Pages ANSWERS:

### Pg. 295 #1

Page 295 Box-and-Whisker Plots



### Pg.307 #1

1. A

### Pg.290 #3, 4

3. 85 cookies ; 4. 8 pounds

### Pg.293 #9, 14

9.  $\approx 12.70$  watts ; 14.  $\approx 7.81$

### Pg.299 #1-10

Page 299 Comparing Data Sets

1. A: 72.5; B: 76.3

2. A: 72; B: 76.5

3. A: 22; B: 10

4. A: 11; B: 7

5. Sample A: 7.97, Sample B: 4.18

6. A: 13,400; B: 13,000

7. A: 15,000; B: 14,000

8. A: 15,000; B: 9,000

9. A: 8,000; B: 3,000

10. Sample A: 5274.7, Sample B: 2828.4

**Pg.287 #9,10**

9. C

10. D

**Pg.306 # 15-16**

15. positive

16. negative

**pg.308 #9,11, 12, 13**

9. A

11. A

13. B

10. D

12. A

**pg.314 #1-6**

Page 314 Interpreting Data in Scatter Plots

1. There is no relationship between the time of day and type of rainfall.
2. As the average daily temperature increases, the amount of coffee sales per day decreases.
3. There is no relationship between the percentage of people unemployed and the percentage of homeless people.
4. As the amount of rainfall increases, the height of a plant increases.
5. The higher the cumulative GPA, the higher the SAT score.
6. As the number of vehicles per mile on a two lane road increase, the speed these vehicles travel decreases.

**pg.319 #6,7**

6.  $y = 80.91x - 189.67$

7.  $y = 10.5x + 0.31$

**pg.311 #12,15**

12.  $y = \frac{1}{4}x - \frac{1}{2}$  ; 15.  $y = \frac{40}{3}x + 80$

**pg.328 #1-4**

1.  $r = 0.808$

2. D

3.  $r = 0.911$

4. D

**pg.326 #1-5, 10-13**

1. Causation

2. Correlation

3. Causation

4. Correlation

5. Correlation

6. Causation

10. Answers will vary. One example is the probability that the student will be on the basketball team. The taller a student, the more likely she is to be on the basketball team. Thus, being taller causes a person to be more effective at playing basketball, this is an example of causation.

11. Answers will vary. One example is the number of vacations taken. The more bicycles on the road, the fewer vacations are taken. Since the number of bicycles on the road probably doesn't affect the number of vacations taken, and the price of gas probably does affect both the number of bicycles on the road and the number of vacations taken, this is not an example of causation.

12. Answers will vary. One example is the number of visits to the doctor a person makes. The more aspirin a person takes, the more visits to the doctor he makes. Since the number of aspirin a person takes probably doesn't affect the number of visits to the doctor he makes (unless he is allergic to aspirin), and the number of days a person is sick probably does effect both the number of aspirin a person takes and the number of visits to the doctor he makes, this is not an example of causation.

13. Answers will vary. One example is the number of fire hydrants used in the city. The more fires in a city, the more fire hydrants used in the city. Since fires cause fire hydrants to be used, this is an example of causation.

**pg.333 #28-31**

28. Correlation

29. Correlation

30. Causation

31. Correlation