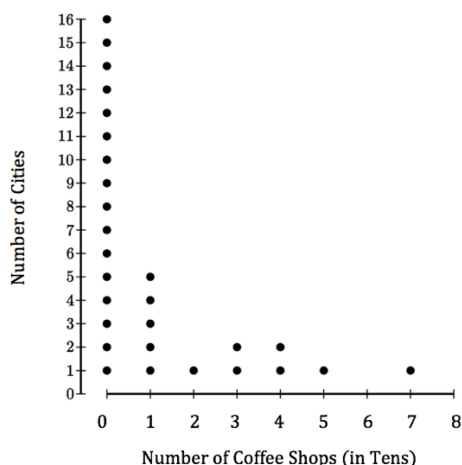


Center, Spread, Shape of Distribution Practice

1. The number of coffee shops in each city in Silicon Valley is shown below in a dot plot. The number of coffee shops were rounded to the nearest 10. According to the dot plot, what is the median number of coffee shops in tens? (*calculator*)



- a. 0
b. 1.39
c. 7
d. 3.5
2. If the mean of a certain set of values is 72, and we are given the values of 130, 51, 32, 75, 106, and x , what does the value of x have to be? (*calculator*)
- a. 72
b. 56
c. 44
d. 38
3. From a survey of her classmates, Janine created a dot plot shown below for the number of hours spent on social media per day, including times when social media is open but not being actively used. What is the mean amount of time Janine's classmates spend on social media every day? (*calculator*)



- a. 1
b. 3
c. 3.64
d. 3.79

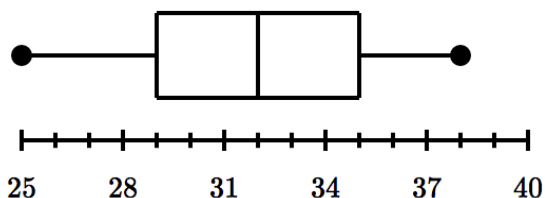
4. During the month, Harold's used car shop sold a different number of used cars per day. The mean number of daily cars sold during this period was 2. During the next month, Harold sold 2 cars per day for 15 days, 1 car per day for 7 days, 3 cars per day for 8 days, and 5 cars on the last day. What is the approximate difference between the means of the number of cars Harold sold during the two months? (*calculator*)
- a. 2.13
b. 0.13
c. 0.03
d. The two means are equal
5. The table below shows Gabriel's monthly expenditures on groceries for the year 2017. What is the range of the grocery expenditures? (*calculator*)

| Month | Expenditures | Month | Expenditures |
|----------|--------------|-----------|--------------|
| January | \$202.32 | July | \$368.38 |
| February | \$423.34 | August | \$389.15 |
| March | \$364.09 | September | \$413.82 |
| April | \$315.01 | October | \$215.09 |
| May | \$453.32 | November | \$348.08 |
| June | \$501.87 | December | \$431.21 |

- a. \$228.89
b. \$251.00
c. \$299.55
d. \$378.77

Center, Spread, Shape of Distribution Practice

6. The box plot below summarizes the length in centimeters of the newborn panda bears. What is the range of the length of the panda cubs? (*no calculator*)



- a. 38
 - b. 32
 - c. 13
 - d. 7
7. The professor applied a curve to the midterm by adding 5 points to each student's exam score. What effect does this have on the mean and median of the class scores? (*no calculator*)
- a. The mean increases by 5 points, but the median remains the same
 - b. The median increases by 5 points, but the mean remains the same
 - c. The mean increases by 5 points, and the median increases by 5 points
 - d. The mean and the median remain the same
8. A pizzeria offers pizzas with the following diameters in inches: 12, 10, 6, 8, 14, x . If the range of the pizza diameters is 10, what is the largest possible value of x ? (*no calculator*)
- a. 10
 - b. 14
 - c. 16
 - d. 8
9. If the median of a certain set of six values is 25, and we are given the values of 9, 29, 17, 100, 67, and x , what value could x be? (*calculator*)
- a. 75
 - b. 25
 - c. 23
 - d. 21
10. If the median of a certain set of five values is 25, and we are given the values of 9, 29, 17, 100, and x , what value could x be? (*calculator*)
- a. 75
 - b. 25
 - c. 23
 - d. 21