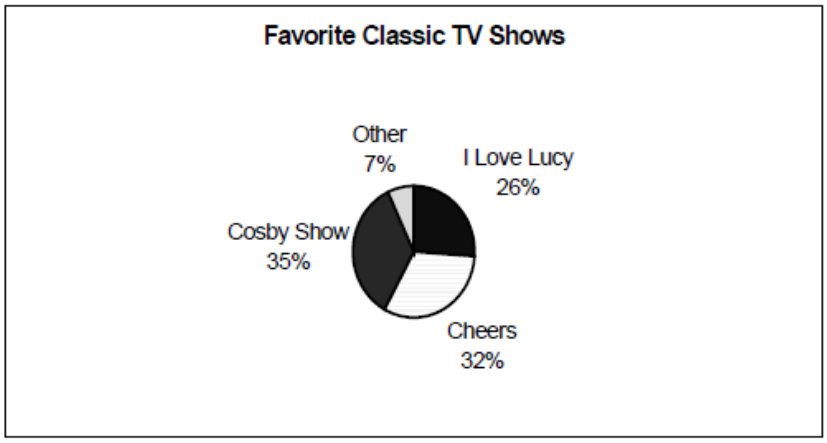
DA22. In a poll of 1280 students at Canton McKinley High School, students were asked to name their favorite classic TV show. The results are illustrated below.



$\frac{x}{1280} = \frac{35}{100}$

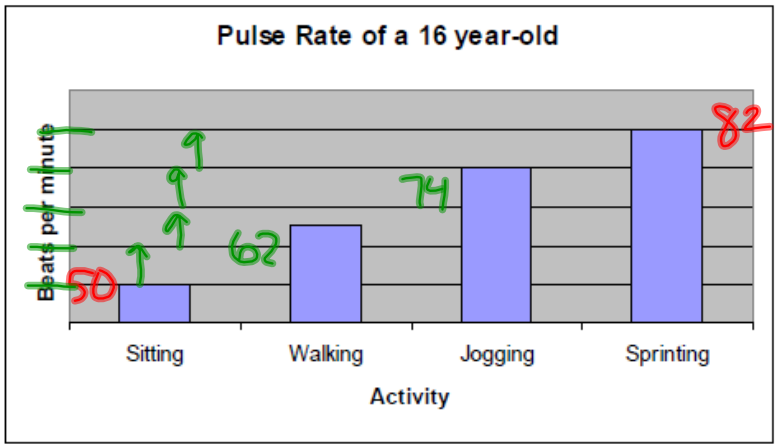
$x = 448$

$\frac{\text{seniors}}{448} = \frac{1}{4}$ $y = 112$

If one-fourth of the students who voted for "The Cosby Show" were seniors, how many seniors voted for "The Cosby Show?"

A) 112 B) 138 C) 320 D) 448

DA31. This graph shows the pulse rate for a 16-year-old student during different activities.



$82 - 50 = 32$

$\frac{32}{4} = 8$

If the student's pulse rate is 50 beats per minute when sitting and 82 beats per minute when sprinting, what is the student's pulse rate in beats per minute when jogging?

A) 68 B) 70 C) 72 D) 74

DA39. Maggie pays $15 per month for her cell phone. She gets the first 200 minutes in the month free. After that it costs 8 cents per minute. Below is a table of the first 4 months of Maggie's cell phone usage.

Month	Number of minutes
January	290
February	330
March	350
April	240

$15 + 90(0.08) = 22.2$
$15 + 130(0.08) = 25.4$
$15 + 150(0.08) = 27$
$15 + 40(0.08) = 18.2$

What is the mean cost per month for Maggie's cell phone?

A) $21.20 B) $22.20 C) $23.20 D) $24.20

DC47. Griselda wanted to find the typical cost of a 14-inch pizza in Steubenville. She called 8 pizza places and obtained the following prices:

$7.35 $7.00 $6.75 $6.50 $6.10 $6.00 $6.00 $5.50

Based on the data she collected, Griselda decided that the typical cost for a 14-inch pizza is $6.30. What measure of central tendency did she use?

A) Mean B) Median C) Mode D) Range

$6.40 $6.30 $6.00 $1.85

DC51. A data set contains 7 single-digit numbers and 2 double-digit numbers. Which statement ***must*** be true?

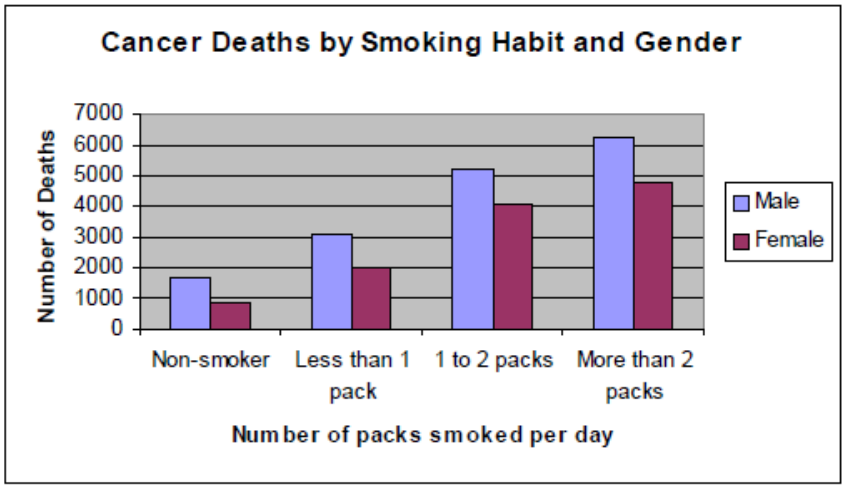
A) The mode is a single-digit number.
B) The mean is a single-digit number.
C) The range is a single-digit number.
D) The median is a single-digit number.

99 98
1, 2, 3, 4, 5, 6, 7, 10, 11

DD57. Shanna's quiz scores in Miss D'Eramo's geography class are:
98, 94, 90, 88, 88, 82, 42.
42 is the outlier. If that score is dropped from the other scores, which of the following is closest to the increase in mean of the remaining scores?

A) 6 B) 7 C) 9 D) 11

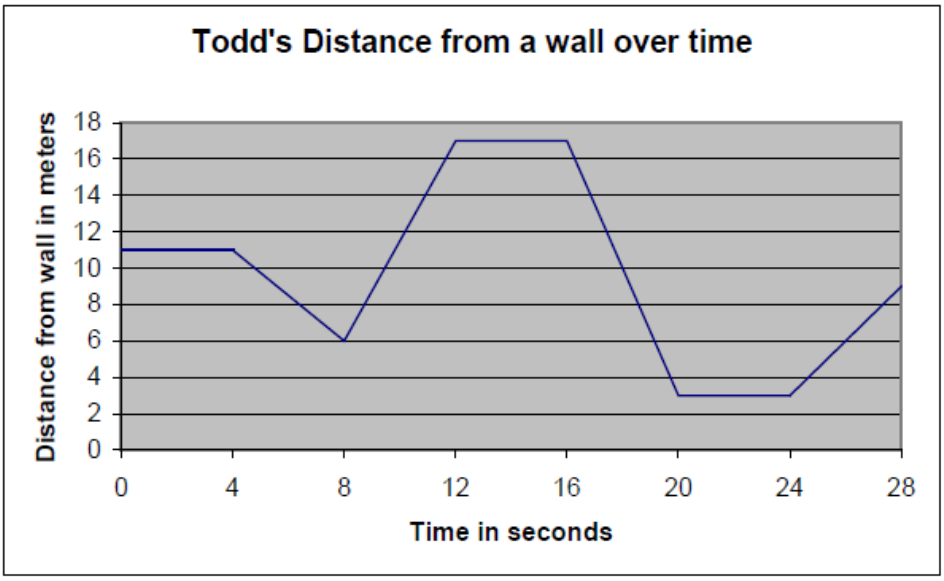
DE77. This graph compares how much a person smokes and the death rate by cancer for males and females.



Based on this graph, which of the following is true?

A) Gender does not appear to have an impact on death by cancer.
B) The more a person smokes, the more likely he/she is to die from cancer.
C) The number of females that die from cancer is about the same as the number of men.
D) Non-smokers do not die from cancer.

DF81. During an activity in math class, Todd's distance away from a wall was recorded by his friend, Kenny, over a 28-second period with a CBR.



Based on this graph, which of the following is false?

A) Todd was 11 meters away from the wall when Kenny began recording.
B) Todd walked toward the wall between the 8th and 12th seconds.
C) Todd stopped walking a total of 12 seconds during the 28-second period.
D) Todd walked the fastest between the 16th and 20th seconds.

DH91. License plates in Portage County will be of the form & # # # & &, where & is a letter and # is a digit from 0 to 9 inclusive. The first letter must be either W, X, Y, or Z, and the last letter must be A or B. If repetition of digits and letters is possible, how many different license plates are possible in Portage County?

A) 52,000 B) 104,00 C) 208,000 D) 17,576,000

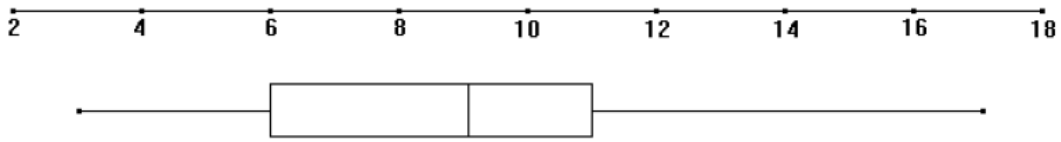
DJ113. BJ has a bag of marbles. 9 are black, 8 are red, 7 are white, and 5 are green. Without looking BJ draws two marbles. He replaces the first marble before drawing the second marble. Which of the following expressions can be used to compute the probability that he first picks a black marble and then a green one?

A) $\frac{9}{29} \times \frac{5}{28}$ *B*) $\frac{9}{29} + \frac{5}{28}$ *C*) $\frac{9}{29} \times \frac{5}{29}$ *D*) $\frac{9}{29} + \frac{5}{29}$

DK138. Kristin works at Videos R Us. She randomly chose 50 videos from a shipment of 1000 videos and found that 3 of them were defective. Based on this information, what is the probability that a video selected from the shipment will not be defective?

A) 0.05 B) 0.94 C) 0.95 D) 0.997

DAER22. Interpret this box-and-whisker plot for the number of hours worked per week:



a) What is the smallest number of hours worked in a week?
b) What is the largest number of hours worked in a week?
c) What number has approximately 50% of the data below it?
d) What number has approximately 25% of the data above it?
e) Between what two numbers is approximately the middle 50% of the data?
f) What is the lower quartile value?
g) What is the median value?