1

Describe this distribution:

School Children

[Histogram ▲▼]

Frequency of **height**

height (inches)
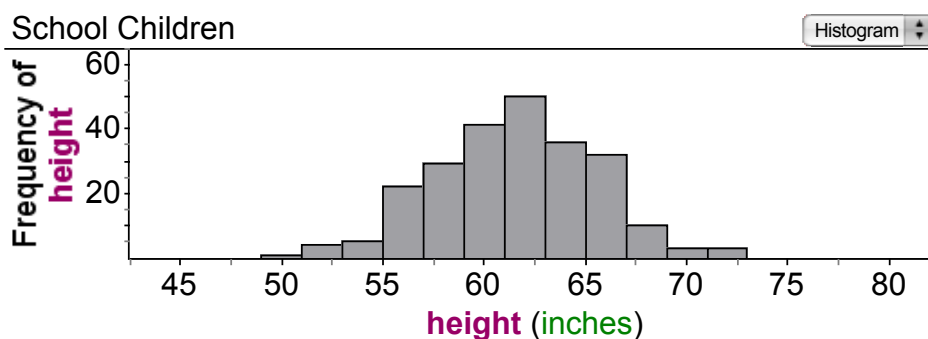
A. normal with center ≈62 in. and SD ≈4 in.	Go To # 9
B. approximately normal with center ≈62 in. and SD ≈4 in.	Go To # 7
C. roughly symmetric with mean ≈64 in. and SD ≈ 4 in.	Go To # 4
D. skewed left with mean ≈62 in. and SD ≈6 in.	Go To # 2

2

Which statement below is NOT true?

US Life Expectancy in Time

Box Plot ⬍

Gender

Female

Male

60   65   70   75   80   85   90   95

LifeExpectancy
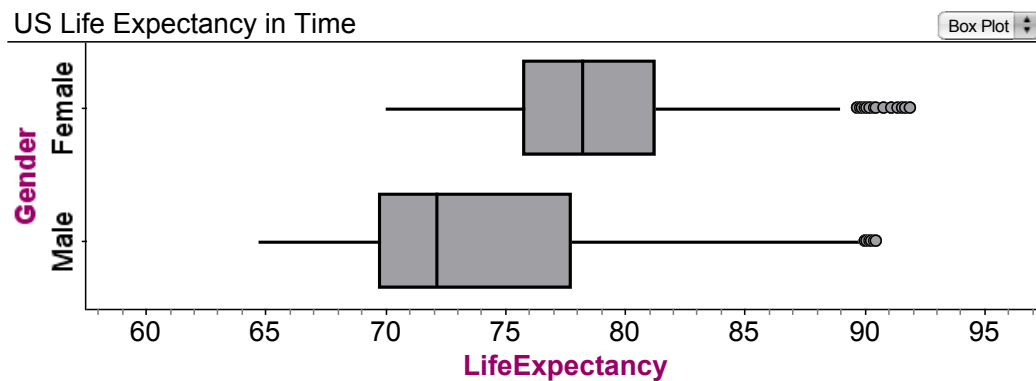
A. both distributions are approximately normal	Go To # 4
B. both distributions are skewed right	Go To # 8
C. females generally live longer than males	Go To # 3
D. the ranges for both are about the same	Go To # 10

3

Which statement below is NOT true?

US Life Expectancy in Time — Box Plot

Gender: Female / Male
LifeExpectancy (x-axis: 60, 65, 70, 75, 80, 85, 90, 95)
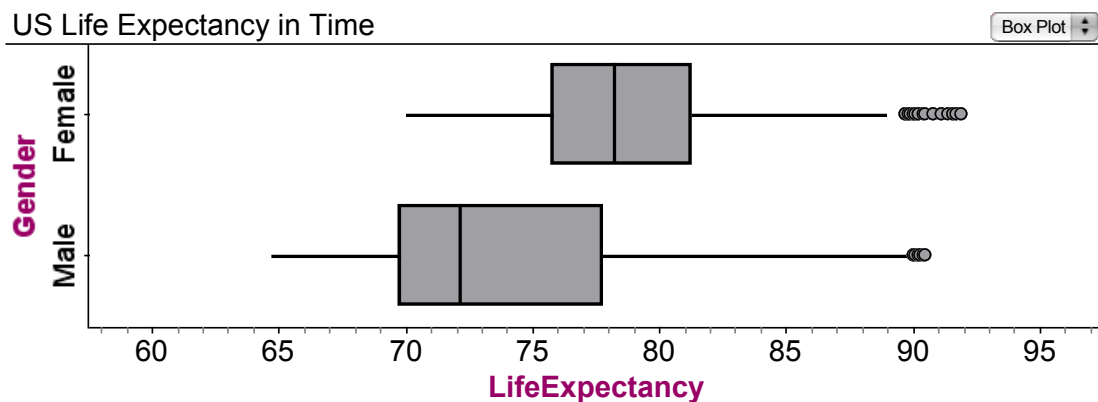
A. there are more female outliers than males	Go To # 1
B. males have a higher IQR than females	Go To # 5
C. the median male life expectancy is higher than for females	Go To # 10
D. the standard deviation for females is larger than for males	Go To # 6

Which statement is false?

|	
A. symmetric distributions are not necessarily mound-shaped	Go To # 10
B. data can never be normal	Go To # 3
C. the mean is larger than the median in a heavily skewed right distribution	Go To # 5
D. the IQR of the data graphed below is ≈72–80	Go To # 8

US Life Expectancy in Time   Box Plot ⇕

60   65   70   75   80   85   90   95

LifeExpectancy
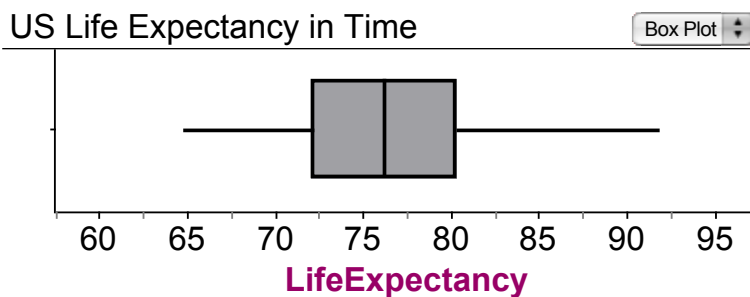
5

What is one advantage of a dot plot over a box plot?

A. A dot plot shows outliers, but a box plot cannot.	Go To # 1
B. A box plot can show skewness, but a dot plot cannot.	Go To # 9
C. A box plot cannot show how many data points there are, but a dot plot can.	Go To # 6
D. A box plot can show shape, but a dot plot cannot.	Go To # 7

6

Which of the following is NOT true about this distribution:

US Life Expectancy in Time   Histogram
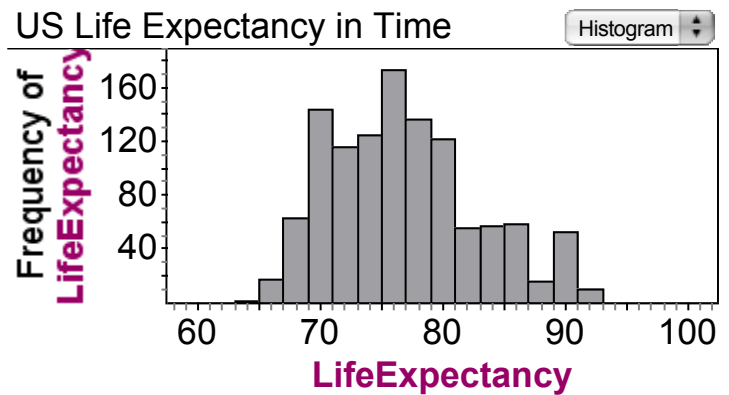
A. the distribution is roughly symmetric	Go To # 7
B. the distribution is mound-shaped	Go To # 2
C. the center of the distribution is ≈77 years	Go To # 9
D. the distribution is normal	Go To # 1

7
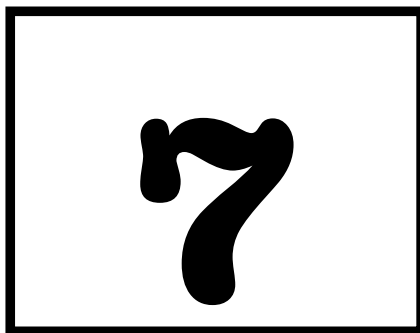
If you could replace one of these five numbers with the number 20, which one would you replace if you want to make the standard deviation as SMALL as possible?

18, 19, 20, 21, 28

A. 21	Go To # 8
B. 19	Go To # 4
C. 20	Go To # 2
D. 28	Go To # 9

8

Suppose the mean car repair cost at a car dealership is $345 and the standard deviation is $125. What is the mean and standard deviation of the 7% tax that is assessed on all repairs?

A. $24.15 and $8.75	Go To # 3
B. $24.25 and $125	Go To # 5
C. $369.15 and $133.75	Go To # 10
D. none of the above	Go To # 6

9

A set of 5000 scores on a college readiness exam are known to be approximately normally distributed with mean 72 and standard deviation 6. To the nearest integer value, how many scores are there between 63 and 75?

A. 3227	Go To # 8
B. 4115	Go To # 3
C. 3650	Go To # 4
D. 3123	Go To # 2

10

One of the values in a normal distribution is 43 and its z score is 1.65. If the mean of the distribution is 40, what is the standard deviation?

A. 3	Go To # 7
B. 1.82	Go To # 5
C. 0.55	Go To # 1
D. -1.82	Go To # 6

KEY/PATH:

1

7

9

2

4

8

3

10

5

6