Pre-Calculus Multiple Choice Questions - Chapter S2

1 Which of the following is NOT part of a univariate EDA?

a Shape
b Center
c Dispersion
d Distribution

	S2.1

2 Which of the following is NOT an acceptable shape description?

a Normally-distributed
b Uniformally-distributed
c Skewed
d Bimodal

	S2.1

3 Which of the following is NOT an acceptable measure of dispersion for a univariate EDA?

a Range
b IQR
c Standard Deviation
d All are acceptable measures

	S2.1

Pre-Calculus Multiple Choice Questions - Chapter S2

1 Describe the shape of a distribution of the following data
12, 12, 12, 12, 13, 13, 13, 13, 13, 13, 13, 13, 13, 14, 15, 17, 18, 18, 20

a Left-Skewed
b Right Skewed
c Normally Distributed
d Uniformily Distributed

S2.2

1 Describe the shape of a distribution of the following data
11, 11, 12, 12, 13, 14, 13, 12, 11, 11

a Left-Skewed
b Right Skewed
c Normally Distributed
d Uniformily Distributed

S2.2

1 Describe the shape of a distribution of the following data
15, 16, 17, 16, 16, 14, 15, 15, 15, 16, 16, 17, 17

a Left-Skewed
b Right Skewed
c Normally Distributed
d Uniformily Distributed

S2.2

Pre-Calculus Multiple Choice Questions - Chapter S2

1 All of the following are measures of the center of a distribution EXCEPT

a IQR **b** Mean

c Median **d** Q2

	S2.3

2 Calculate the mean of the following set of numbers
36, 28, 27, 40, 17, 19, 42, 2, 6, 39

a 27 **b** 25.6

c 27.5 **d** 28

	S2.3

3 Calculate the median of the following set of numbers
36, 28, 27, 40, 17, 19, 42, 2, 6, 39

a 27 **b** 25.6

c 27.5 **d** 28

	S2.3

1 Calculate the mean of the following set of data
32, 29, 12, 21, 19, 10, 26, 22, 35, 10, 33, 28, 21, 26, 23, 26, 33, 28, 14, 19, 32

a 59.4 **b** 26

c 7.71 **d** 23.76

	S2.3

2 Calculate the median of the following set of data
32, 29, 12, 21, 19, 10, 26, 22, 35, 10, 33, 28, 21, 26, 23, 26, 33, 28, 14, 19, 32

a 59.4 **b** 26

c 7.71 **d** 23.76

	S2.3

Pre-Calculus Multiple Choice Questions - Chapter S2

1 Calculate the range of the following set of numbers
36, 28, 27, 40, 17, 19, 42, 2, 6, 39

a 40 **b** 203.38
c 14.26 **d** 21.25

	S2.4

2 Calculate the IQR of the following set of numbers
36, 28, 27, 40, 17, 19, 42, 2, 6, 39

a 40 **b** 203.38
c 14.26 **d** 21.25

	S2.4

3 Calculate the Standard Deviation of the following set of numbers
36, 28, 27, 40, 17, 19, 42, 2, 6, 39

a 40 **b** 203.38
c 14.26 **d** 21.25

	S2.4

Pre-Calculus Multiple Choice Questions - Chapter S2

1 Outliers are defined as individuals that are _____ away from Q1 and Q3

a 1.5 times
b 2 times
c 1.5 plus
d 2 plus

	S2.5

2 Outliers should _____ be removed from a sample

a Never
b Sometimes
c Always
d Depends on the situation

	S2.5

3 Which individuals are outliers in the following data set
14, 17, 20, 17, 18, 19, 11, 18, 17, 17

a 11, 14
b 11 only
c 20 only
d 11, 20

	S2.5

Pre-Calculus Multiple Choice Questions - Chapter S2

1 Consider a data set of positive values, at least two of which are not equal. Which of the following sample statistics will be changed when each value in the data set is multiplied by a constant whose absolute value is greater than 1?

I. The mean
II. The median
III. The standard deviation

a I only
b II only
c III only
d I and II only
e I, II, and III

	S2.6

2 Determine what technique should be used to measure the center of the data below
24, 27, 28, 27, 30, 20, 30, 24, 27, 21, 20, 24, 23, 27, 26, 29, 20, 22, 30, 30, 28

a Mean
b Median
c Mode
d Q3

	S2.6

3 Determine what technique should be used to measure the dispersion of the data below
24, 27, 28, 27, 30, 20, 30, 24, 27, 21, 20, 24, 23, 27, 26, 29, 20, 22, 30, 30, 28

a Range
b Variance
c IQR
d Standard Deviation

	S2.6

Pre-Calculus Multiple Choice Questions - Chapter S2

1 Compute the variance for the following set of data
20, 21, 24, 24, 26, 27

a 1.89 **b** 2.73
c 7.47 **d** 9.21

	S2.7

2 Compute the standard deviation for the following set of data
20, 21, 24, 24, 26, 27

a 1.89 **b** 2.73
c 7.47 **d** 9.21

	S2.7

3 Calculate the standard deviation of the following set of data
32, 29, 12, 21, 19, 10, 26, 22, 35, 10, 33, 28, 21, 26, 23, 26, 33, 28, 14, 19, 32

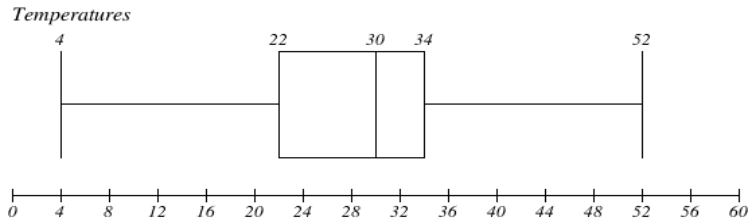
a 59.4 **b** 26
c 7.71 **d** 23.76

	S2.7

Pre-Calculus Multiple Choice Questions - Chapter S2

1 Determine the median of the data represented in the boxplot below

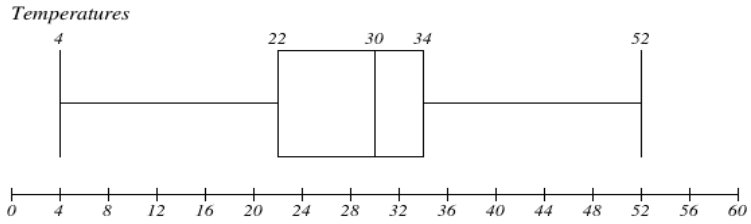
	S2.8



a 22
b 30
c 34
d 12

2 Determine the IQR of the data represented in the boxplot below

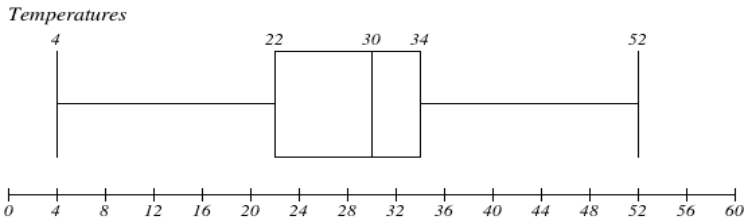
	S2.8



a 22
b 30
c 34
d 12

3 Determine the shape of the data represented in the boxplot below

	S2.8



a Left-Skewed
b Right-Skewed
c Normally Distributed
d Uniformily Distributed

Pre-Calculus Multiple Choice Questions - Chapter S2

1 Determine the shape of the data represented in the frequency table below

	S2.9

Data	Frequency
10	10
11	5
12	4
13	2
14	1

a Left-Skewed
b Right-Skewed
c Normally Distributed
d Uniformily Distributed

2 Determine the median of the data represented in the frequency table below

	S2.9

Data	Frequency
10	10
11	5
12	4
13	2
14	1

a 10
b 10.40
c 10.90
d 11

3 Determine the mean of the data represented in the frequency table below

	S2.9

Data	Frequency
10	10
11	5
12	4
13	2
14	1

a 10
b 10.40
c 10.90
d 11