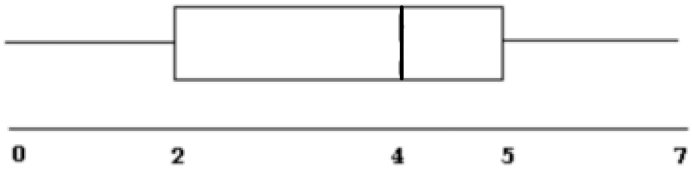
MTH 150 Test 1
Fall 2025

Elementary Statistics

When finished submit your answers by following the appropriate link on ***my Assignments page****.*
If you feel the answer is none of the choices given, submit no answer to the question.

1. What is your test ID ? **T1231A**

2 Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

(C) There are no data values of 3.

(D) 50% of the data are 4.

3. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0 **(C)** 2

(B) 1 **(D)** 3

4. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

5. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

6. The data is {1, 6, 6, 11, 18, 18}. Can the data be considered normally distributed. Why?

7. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

- In comparing the hexokinase method with the glucose oxidase method for measuring glucose it was found that the mean and standard deviation for the hexokinase method were 120 mg/dl and 4.8 mg/dl respectively. The mean and standard deviation for the glucose oxidase method was 100 mg/dl and 4.0 mg/dl. Graphical analysis, however, seemed to indicate that there was **not** more variation present in the hexokinase method.

8. Which evaluation method really exhibited the greatest variability ?

(A) Hexokinase method

(B) Glucose oxidase method

(C) Neither

(D) Cannot be determined

9. The *NLN Test* used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

10. We have been analyzing ungrouped data in our class. To analyze grouped data we must "ungroup" the data. Calculate the mean **and** standard deviation for the grouped data set below.

Start	End	Frequency
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35	39	2
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45	49	1

11. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum

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(C) to adjust the senseless measurement labeling

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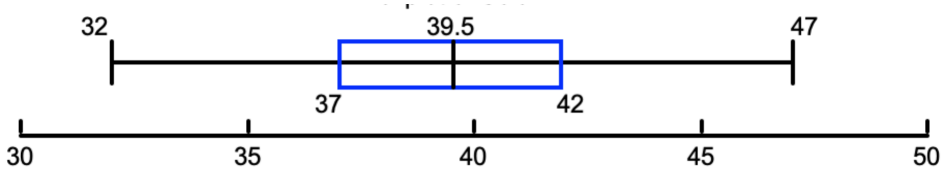

(A) 32 is an outlier.

(B) The IQR is 25.

(C) One half of all the data are between 32 and 37 .

(D) About 25% of all the data are greater than 42 .

13. Data outliers can be easily identified by using which of the following?

(A) relative frequency histogram

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14. Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

(A) 46 kg **(B)** 149 kg **(C)** 214 kg **(D)** 252 kg

15. We have still have not technically done any statistical analysis, only general data analysis. At what point could we say we have really done statistical analysis?

16. From 1984 to 1995, the winning scores for a golf tournament were 277, 280, 282, 284, and 270. Find the mean absolute deviation (MAD) for this data.

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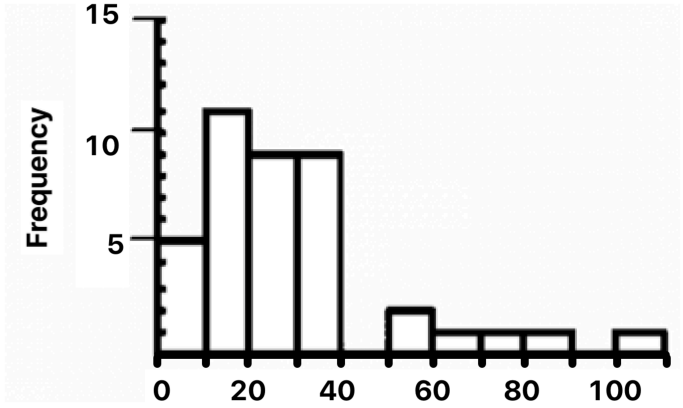
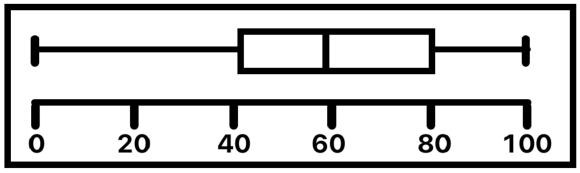
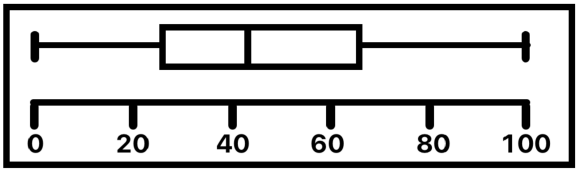


(A)



(C)



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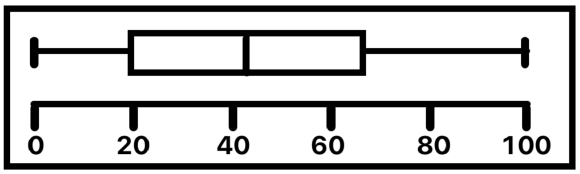

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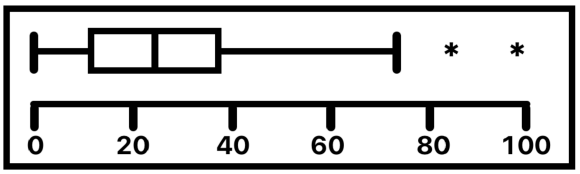

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20. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest z-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

(B) A score of 90 on a test with a mean of 86 and a standard deviation of 20.

(C) A score of 20 on a test with a mean of 15 and a standard deviation of 5.

21. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

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2. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

3. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum
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(A) 0
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7. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

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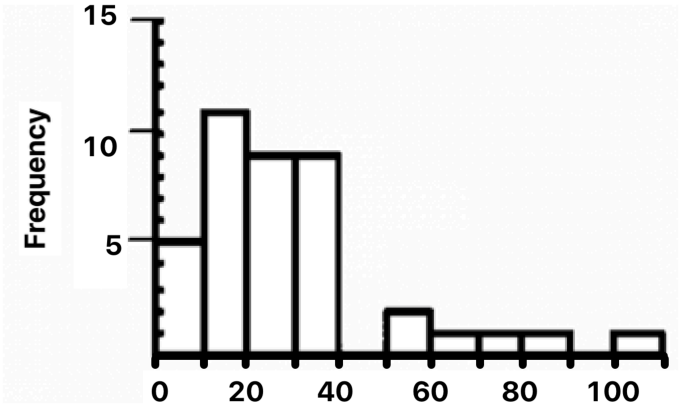
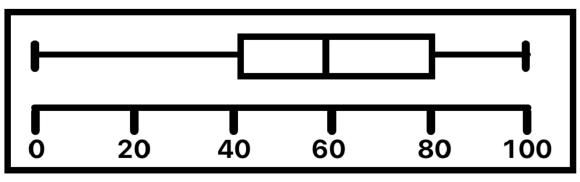
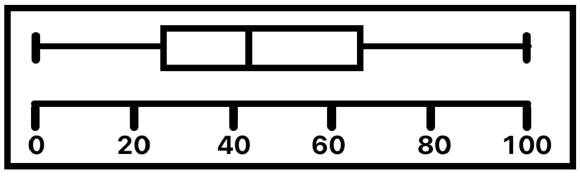


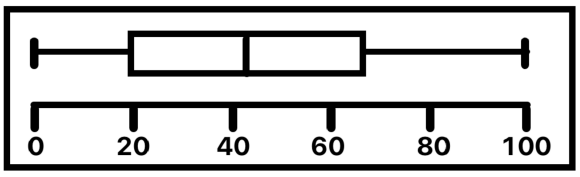
(A)



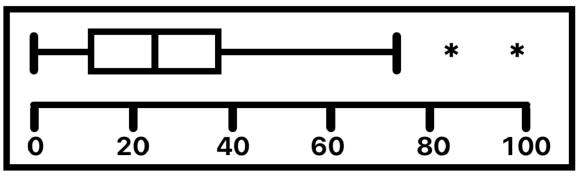
(C)



(B)



(D)



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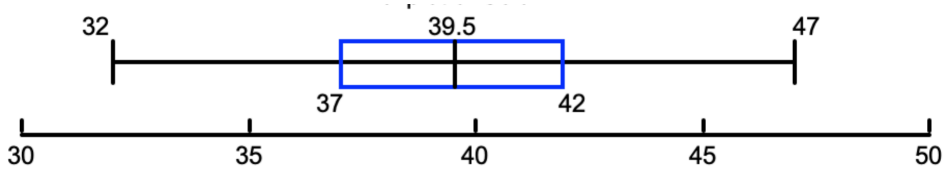

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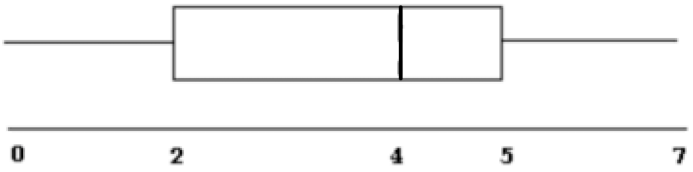

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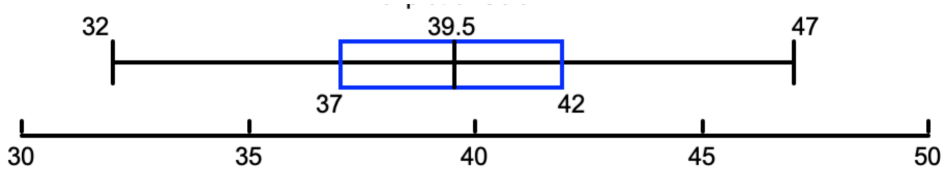

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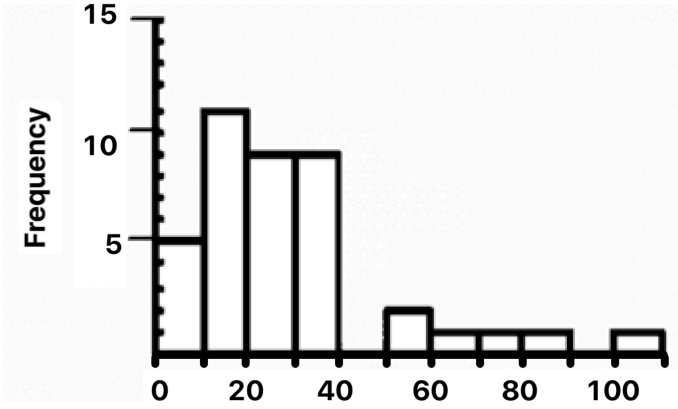
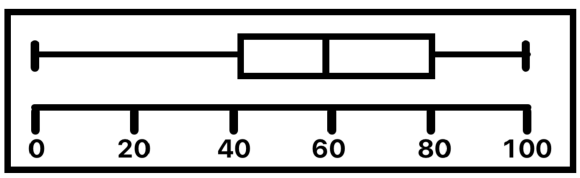
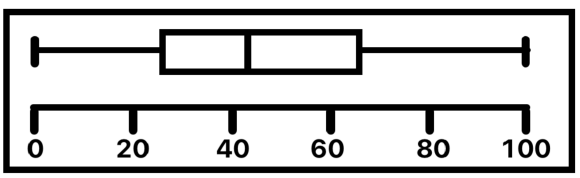


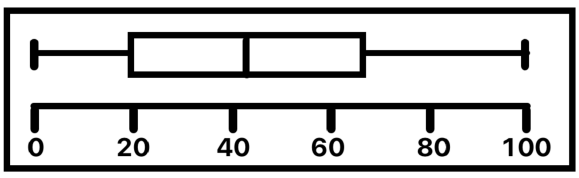
(A)



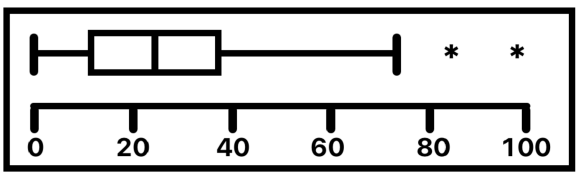
(C)



(B)



(D)



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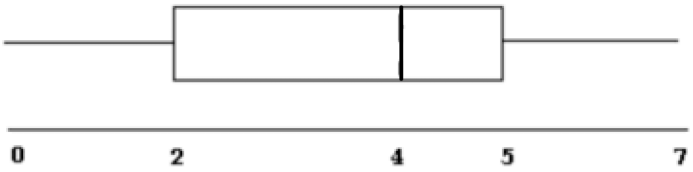

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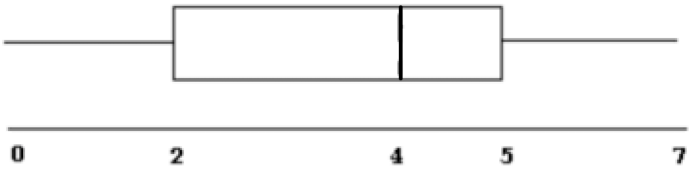

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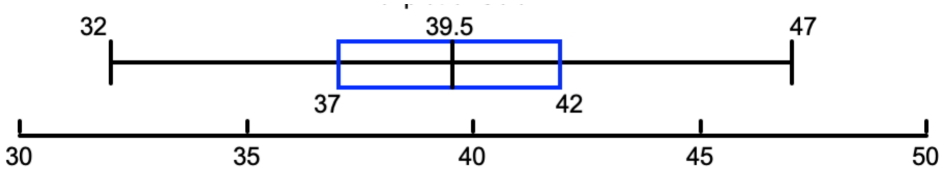

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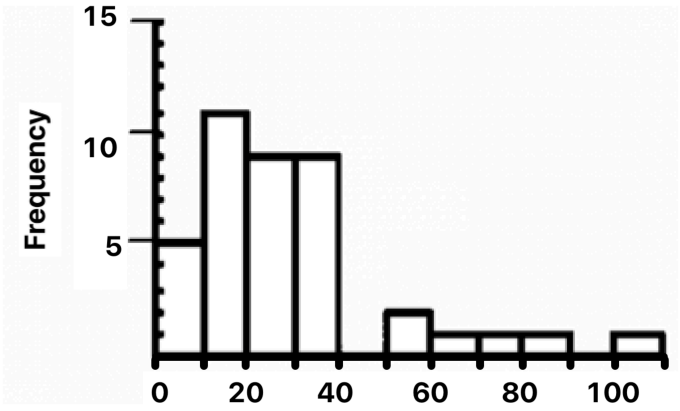
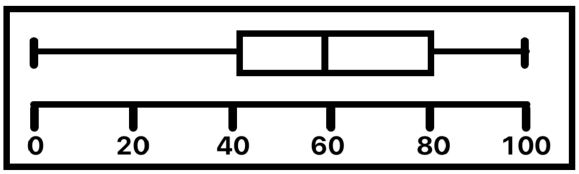
(C) Neither

(D) Cannot be determined

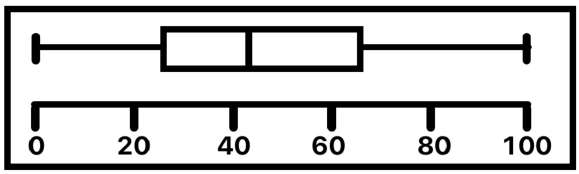
18. Which box plot was made from the histogram below?



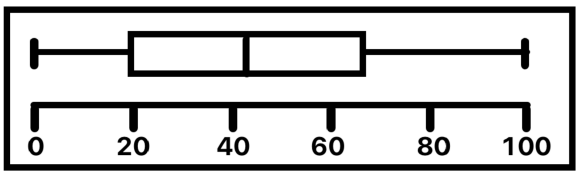
(A)



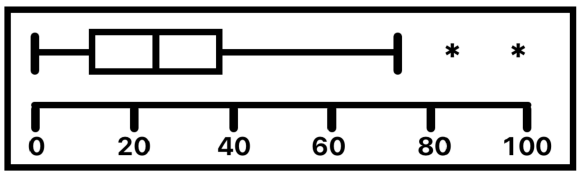
(C)



(B)



(D)



19. From 1984 to 1995, the winning scores for a golf tournament were 277, 280, 282, 284, and 270. Find the mean absolute deviation (MAD) for this data.

20. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

21. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum

(B) to compensate for outliers

(C) to adjust the senseless measurement labeling

(D) to remove the degree of bias

MTH 150 Test 1
Fall 2025

Elementary Statistics

When finished submit your answers by following the appropriate link on ***my Assignments page****.*
If you feel the answer is none of the choices given, submit no answer to the question

1. What is your test ID ? **T1407E**

2. Suppose that the mean of a set of data is 30 and the standard deviation is 4.2. Assume that the data needed to be rescaled by subtracting 5.1 from each data item. Compute the mean and the standard deviation of the new data set.

3. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

4. From 1984 to 1995, the winning scores for a golf tournament were 277, 280, 282, 284, and 270. Find the mean absolute deviation (MAD) for this data.

5. We have been analyzing ungrouped data in our class. To analyze grouped data we must "ungroup" the data. Calculate the mean and standard deviation for the grouped data set below.

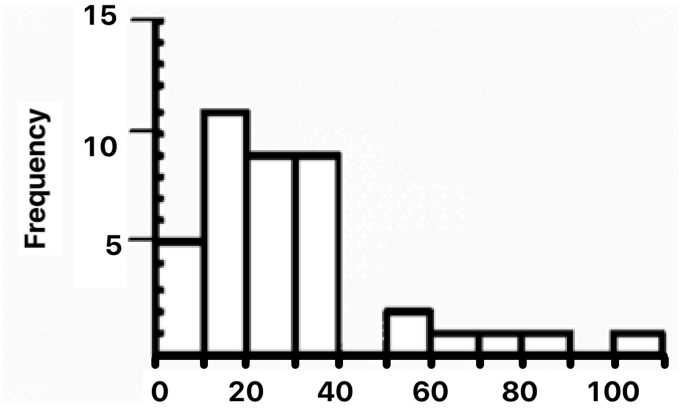
Start	End	Frequency
30	34	1
35	39	2
40	44	2
45	49	1

6. The data is {1, 6, 6, 11, 18, 18}. Can the data be considered normally distributed. Why?

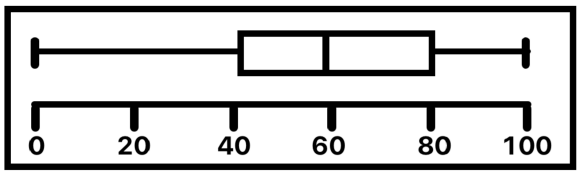
7. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0
(B) 1
(C) 2
(D) 3

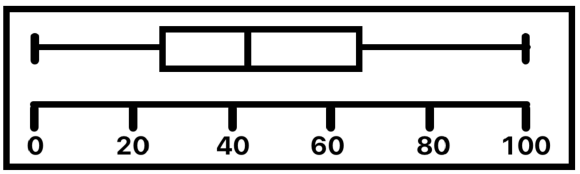
8. Which box plot was made from the histogram below?



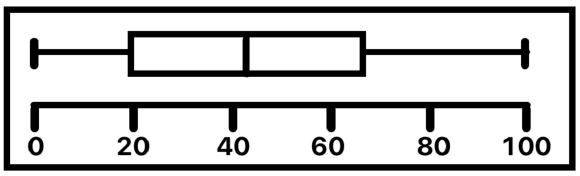
(A)



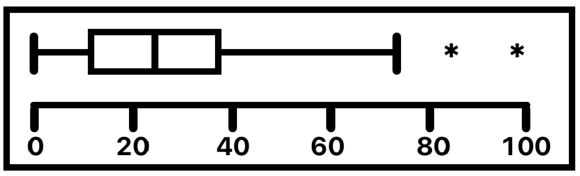
(C)



(B)



(D)



9. We have still have not technically done any statistical analysis, only general data analysis. At what point could we say we have really done statistical analysis?

10. Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

(A) 46 kg **(B)** 149 kg **(C)** 214 kg **(D)** 252 kg

- In comparing the hexokinase method with the glucose oxidase method for measuring glucose it was found that the mean and standard deviation for the hexokinase method were 120 mg/dl and 4.8 mg/dl respectively. The mean and standard deviation for the glucose oxidase method was 100 mg/dl and 4.0 mg/dl. Graphical analysis, however, seemed to indicate that there was not more variation present in the hexokinase method.

11. Which evaluation method really exhibited the greatest variability ?

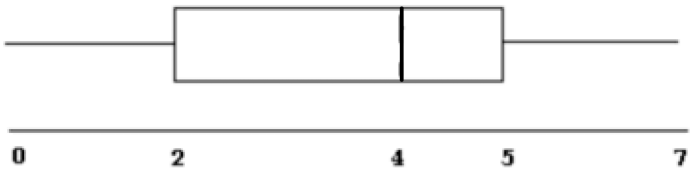
(A) Hexokinase method

(B) Glucose oxidase method

(C) Neither

(D) Cannot be determined

12. Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

(C) There are no data values of 3.

(D) 50% of the data are 4.

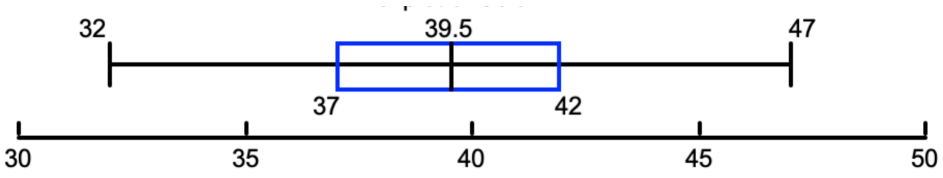
13. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest *z*-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

(B) A score of 90 on a test with a mean of 86 and a standard deviation of 20.

(C) A score of 20 on a test with a mean of 15 and a standard deviation of 5.

14. The box-and-whisker plot for the grouped data table in the previous problem is given below. Which of the following statements is true?



(A) 32 is an outlier.

(B) The IQR is 25.

(C) One half of all the data are between 32 and 37

(D) About 25% of all the data are greater than 42 .

.**15.** Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum

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(C) to adjust the senseless measurement labeling

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16. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

17. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range .

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

18. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

19. Which of the following is generally not affected by outliers?

(A) mean

(B) standard deviation

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20. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

21. Data outliers can be easily identified by using which of the following?

(A) relative frequency histogram

(B) modified box plot

(C) QQ plot

(D) frequency histogram

MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1350F**

2. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

3. Which of the following is generally not affected by outliers?

(A) mean
(B) standard deviation
(C) inter-quartile range
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4. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

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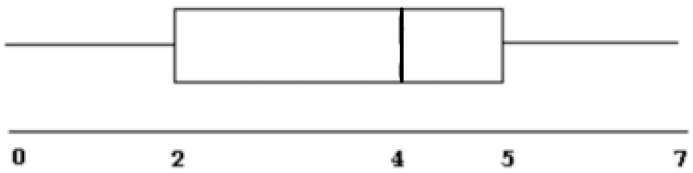
6. Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

(C) There are no data values of 3.

(D) 50% of the data are 4.

7. We have still have not technically done any statistical analysis, only general data analysis. At what point could we say we have really done statistical analysis?

8. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

9. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum

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10. Suppose that the mean of a set of data is 30 and the standard deviation is 4.2. Assume that the data needed to be rescaled by subtracting 5.1 from each data item. Compute the mean and the standard deviation of the new data set.

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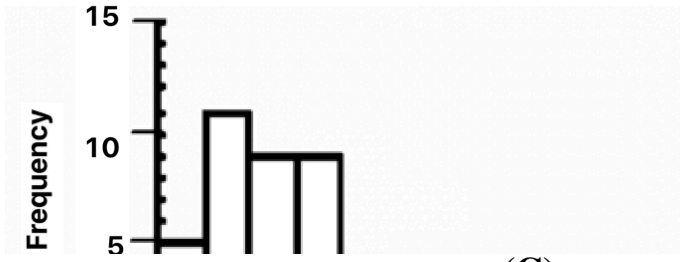

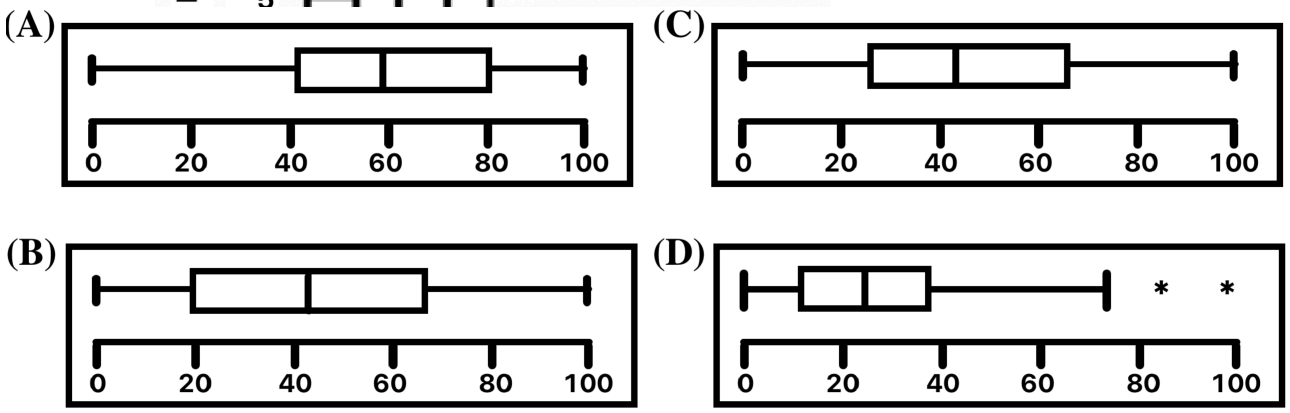

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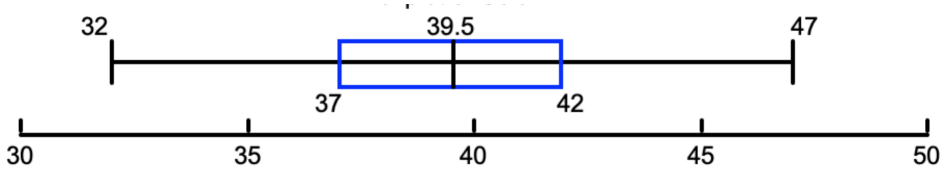

(A) 32 is an outlier.between 32 and 37 .

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19. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

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21. From 1984 to 1995, the winning scores for a golf tournament were 277, 280, 282, 284, and 270. Find the mean absolute deviation (MAD) for this data.

MTH 150 Test 1
Fall 2025

Elementary Statistics

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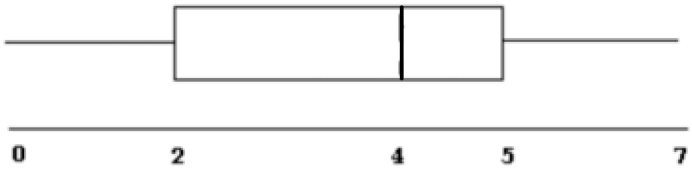
1. What is your test ID ? **T1247G**

2 Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

(C) There are no data values of 3.

(D) 50% of the data are 4.

3. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0 **(C)** 2

(B) 1 **(D)** 3

4. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

5. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

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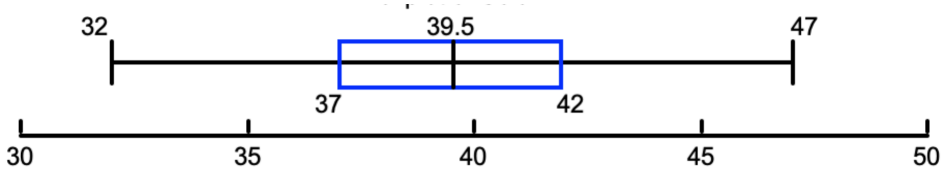

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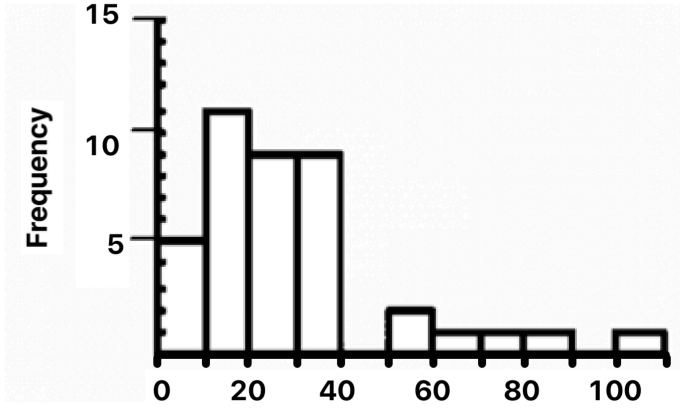
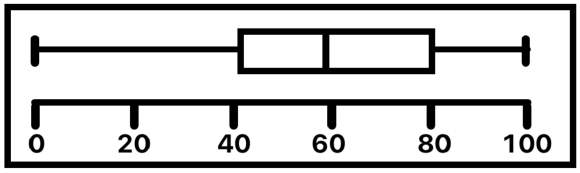
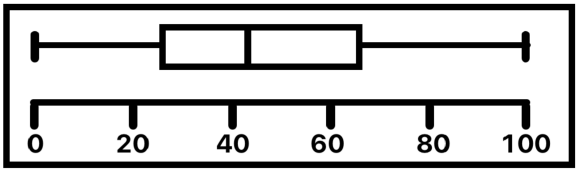


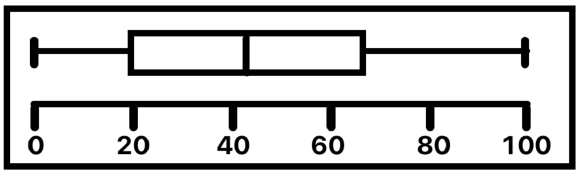
(A)



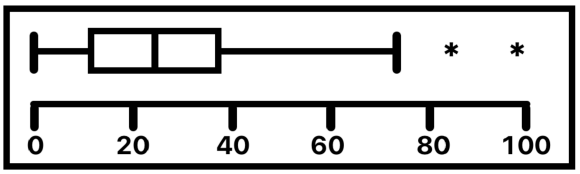
(C)



(B)



(D)



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MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1250H**

2. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

3. Why must we square the deviations from the mean in calculating the standard deviation?

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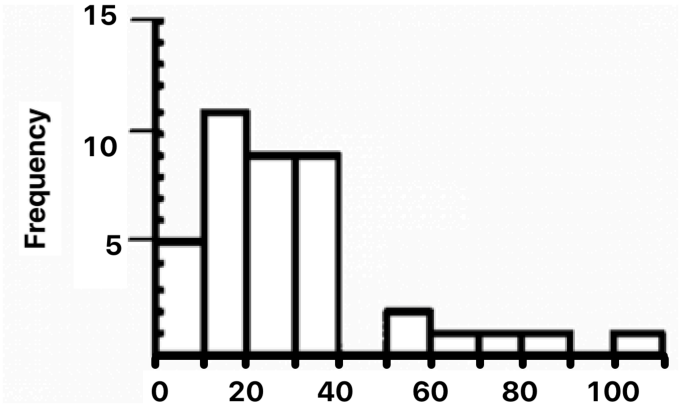
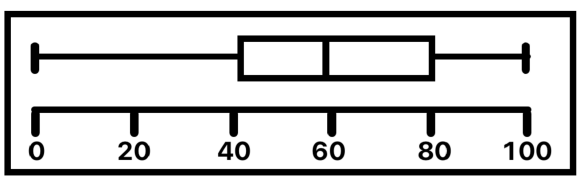
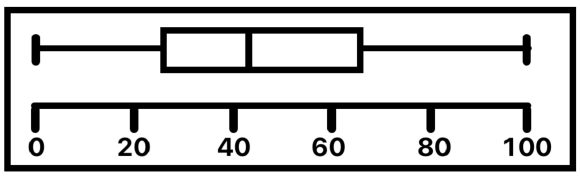


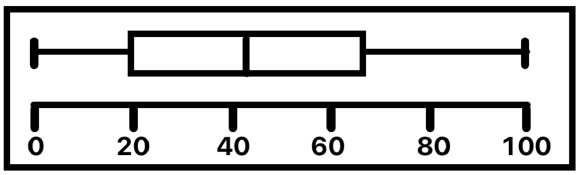
(A)



(C)



(B)



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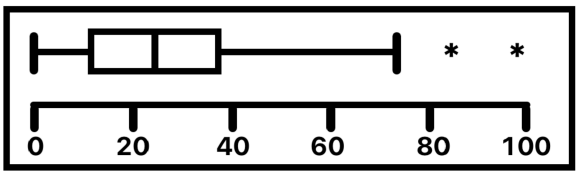

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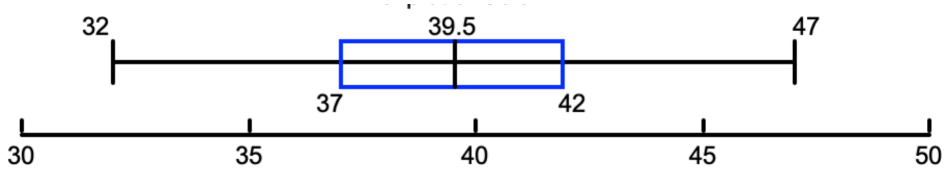

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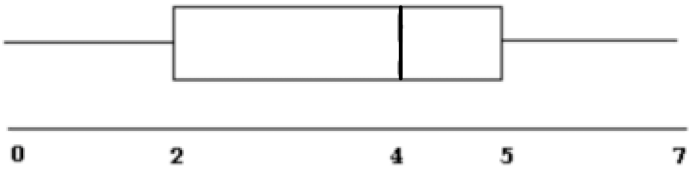

(A) 75% of the data are at most 5.

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1303I**

2. Why must we square the deviations from the mean in calculating the standard deviation?

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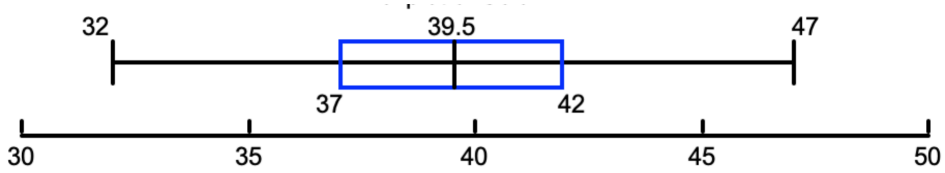

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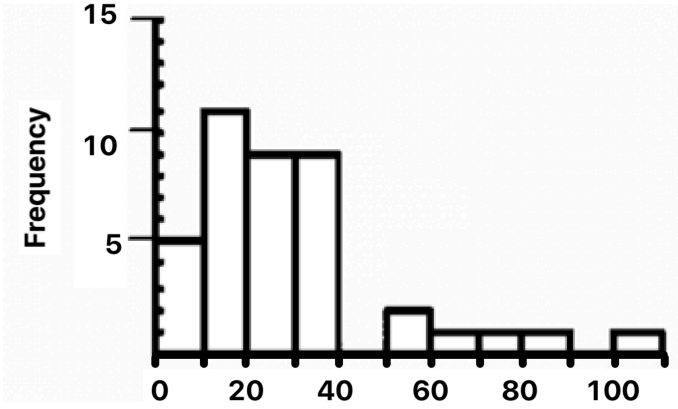

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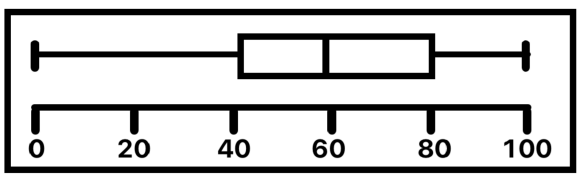

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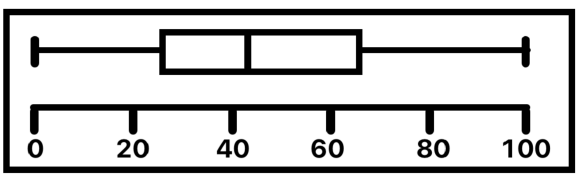

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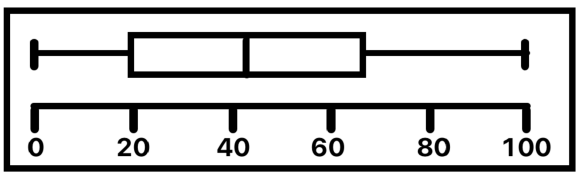

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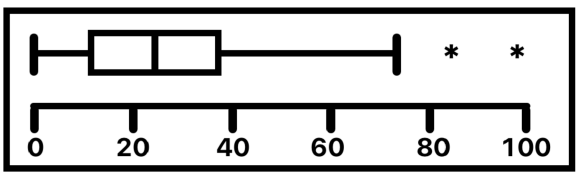

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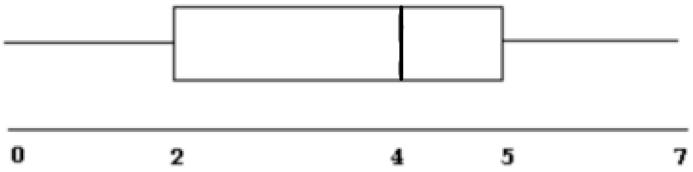

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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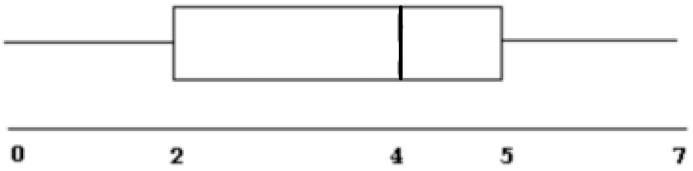

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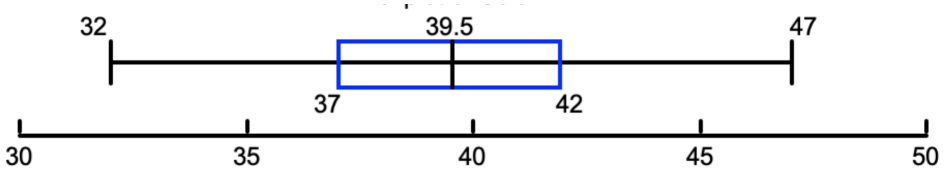

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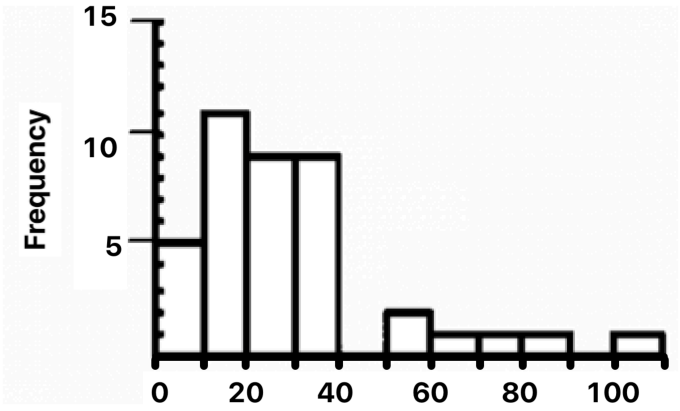

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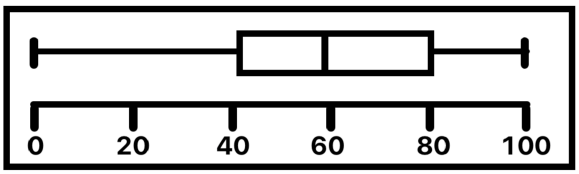

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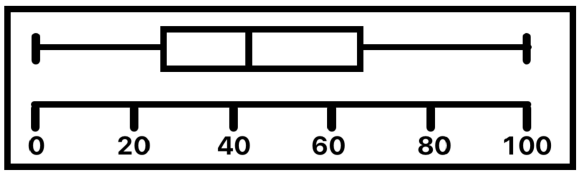

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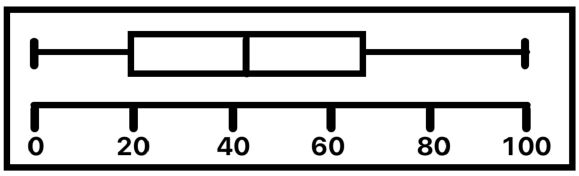

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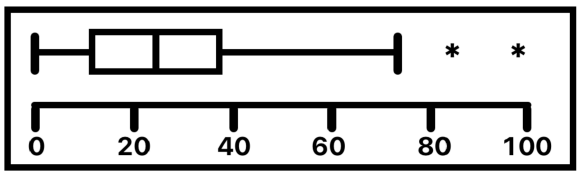

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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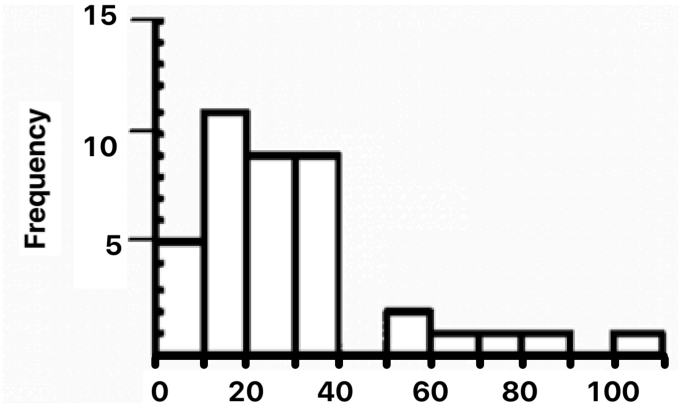

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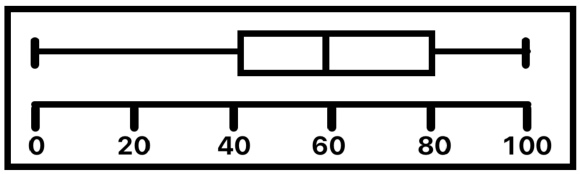

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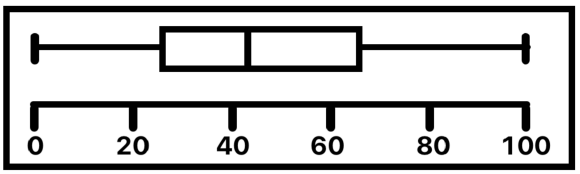

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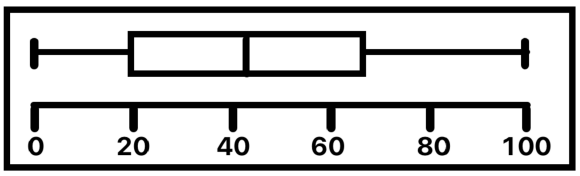

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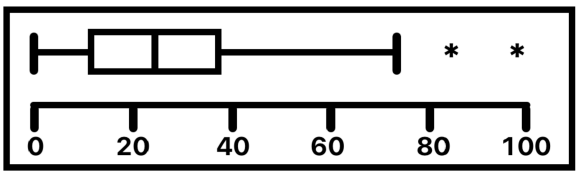

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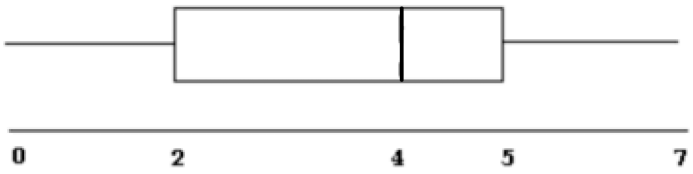

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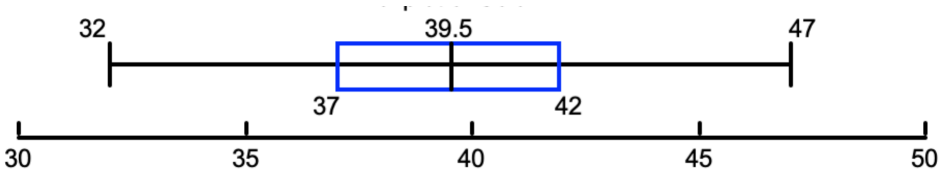

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20. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

21. Data outliers can be easily identified by using which of the following?

(A) relative frequency histogram
(B) modified box plot
(C) QQ plot
(D) frequency histogram

MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1293L**

2. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

3. Which of the following is generally not affected by outliers?

(A) mean
(B) standard deviation
(C) inter-quartile range
(D) range

4. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

5. We have been analyzing ungrouped data in our class. To analyze grouped data we must "ungroup" the data. Calculate the mean and standard deviation for the grouped data set below.

Start	End	Frequency
30	34	1
35	39	2
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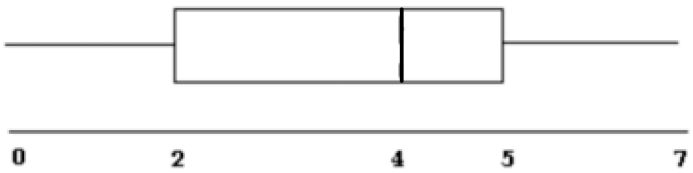
45	49	1

6. Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

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7. We have still have not technically done any statistical analysis, only general data analysis. At what point could we say we have really done statistical analysis?

8. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

9. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum

(B) to compensate for outliers

(C) to adjust the senseless measurement labeling

(D) to remove the degree of bias

10. Suppose that the mean of a set of data is 30 and the standard deviation is 4.2. Assume that the data needed to be rescaled by subtracting 5.1 from each data item. Compute the mean and the standard deviation of the new data set.

11. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest *z*-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

(B) A score of 90 on a test with a mean of 86 and a standard deviation of 20.

(C) A score of 20 on a test with a mean of 15 and a standard deviation of 5.

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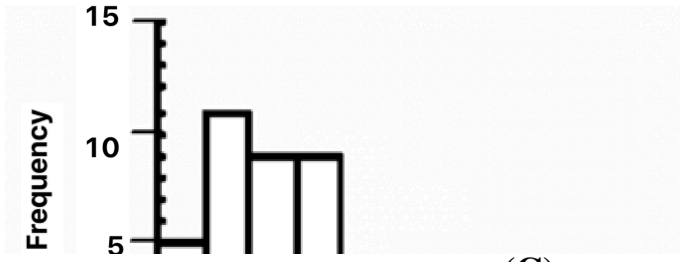

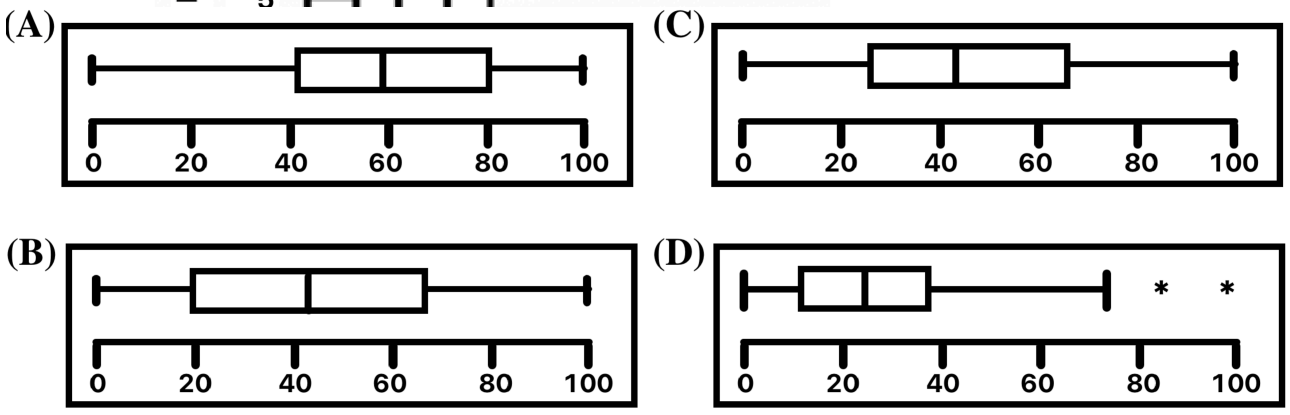

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16 Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

(A) 46 kg **(B)** 149 kg **(C)** 214 kg **(D)** 252 kg

17. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0
(B) 1
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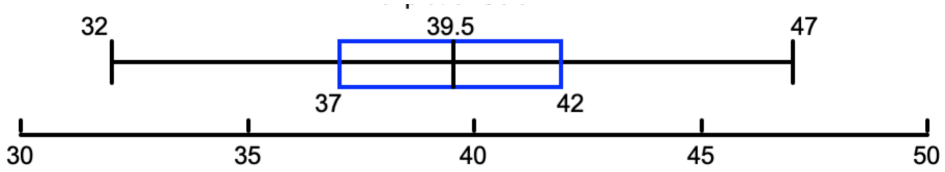

(A) 32 is an outlier.between 32 and 37 .

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(C) The IQR is 25.

(D) One half of all the data are

19. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

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21. From 1984 to 1995, the winning scores for a golf tournament were 277, 280, 282, 284, and 270. Find the mean absolute deviation (MAD) for this data.

MTH 150 Test 1
Fall 2025

Elementary Statistics

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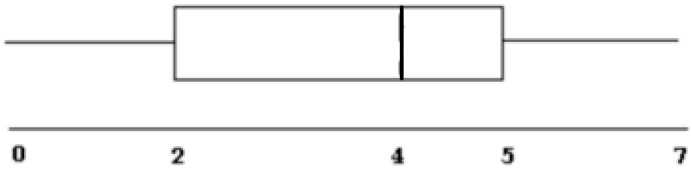
1. What is your test ID ? **T1471M**

2 Interpret the boxplot



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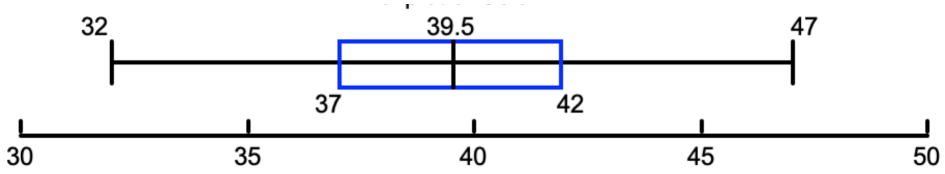

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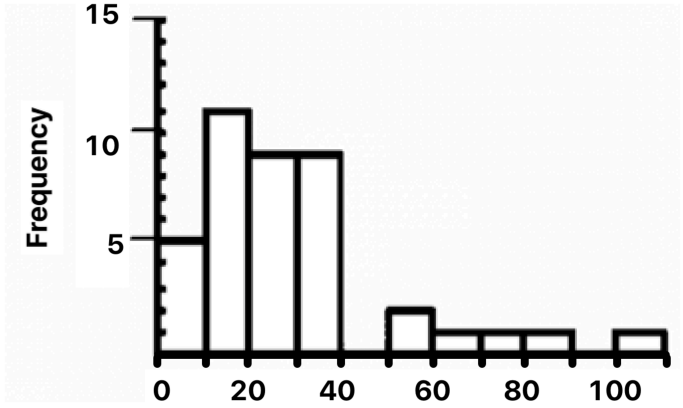
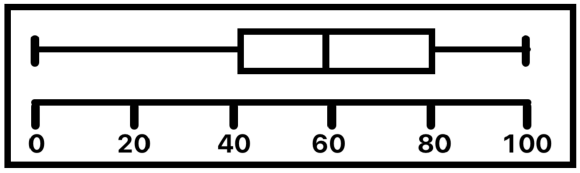
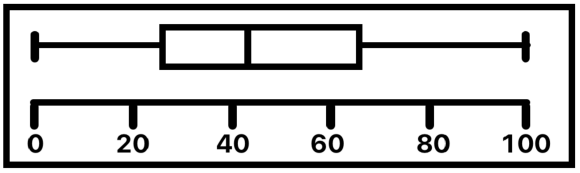


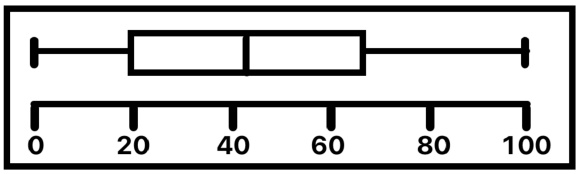
(A)



(C)



(B)



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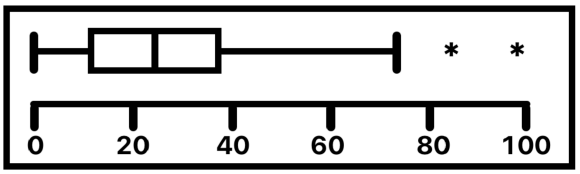

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1460N**

2. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

3. Why must we square the deviations from the mean in calculating the standard deviation?

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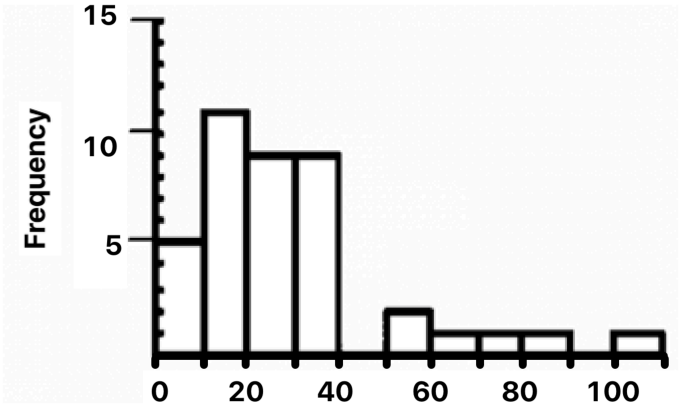
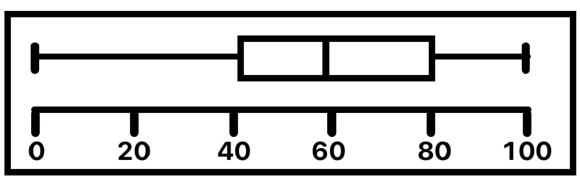


(A)



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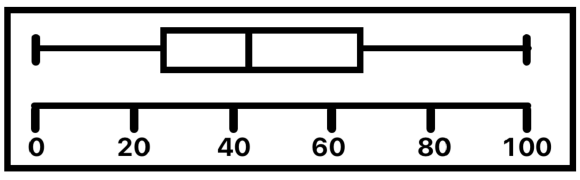
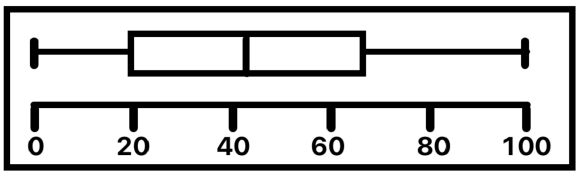


(B)



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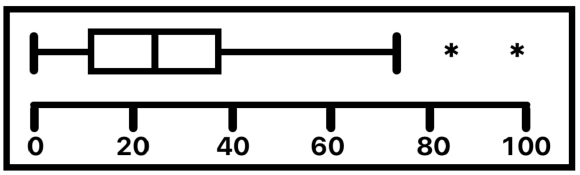

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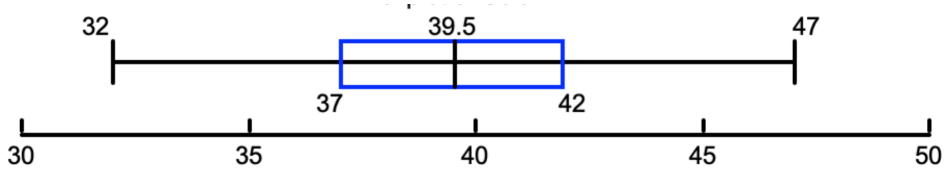

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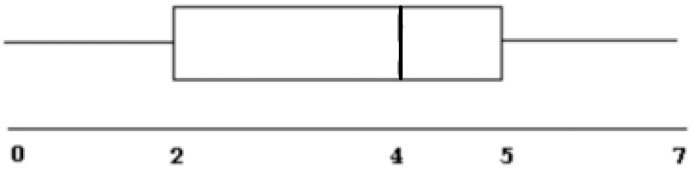

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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2. Why must we square the deviations from the mean in calculating the standard deviation?

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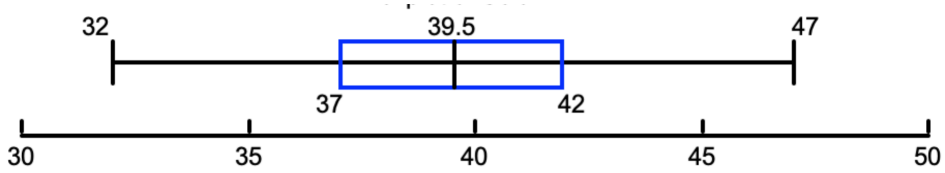

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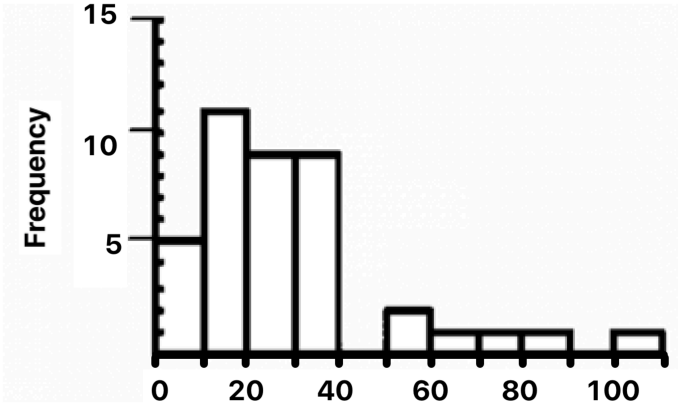
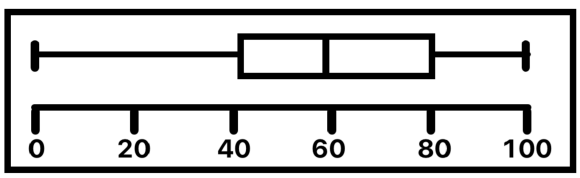
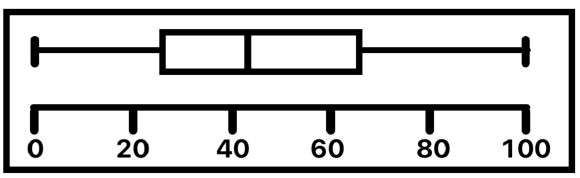


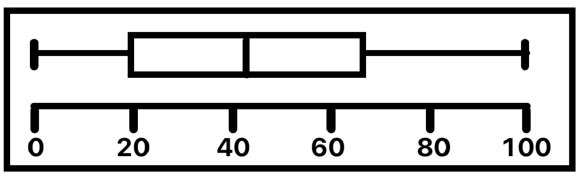
(A)



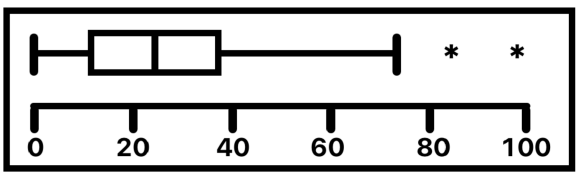
(C)



(B)



(D)



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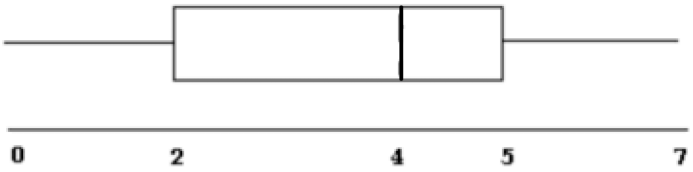

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13. Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

(A) 46 kg **(B)** 149 kg **(C)** 214 kg **(D)** 252 kg

14. We have been analyzing ungrouped data in our class. To analyze grouped data we must "ungroup" the data. Calculate the mean and standard deviation for the grouped data set below.

Start	End	Frequency
30	34	1
35	39	2
40	44	2
45	49	1

15. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

16. The data is {1, 6, 6, 11, 18, 18}. Can the data be considered normally distributed. Why?

- In comparing the hexokinase method with the glucose oxidase method for measuring glucose it was found that the mean and standard deviation for the hexokinase method were 120 mg/dl and 4.8 mg/dl respectively. The mean and standard deviation for the glucose oxidase method was 100 mg/dl and 4.0 mg/dl. Graphical analysis, however, seemed to indicate that there was not more variation present in the hexokinase method.

17. Which evaluation method really exhibited the greatest variability ?

(A) Hexokinase method
(B) Glucose oxidase method
(C) Neither
(D) Cannot be determined

18. We have still have not technically done any statistical analysis, only general data analysis. At what point could we say we have really done statistical analysis?

19. Which of the following is generally not affected by outliers?

(A) mean
(B) standard deviation
(C) inter-quartile range
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20. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0
(B) 1
(C) 2
(D) 3

21. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

MTH 150 Test 1
Fall 2025

Elementary Statistics

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If you feel the answer is none of the choices given, submit no answer to the question

1. What is your test ID ? **T1499P**

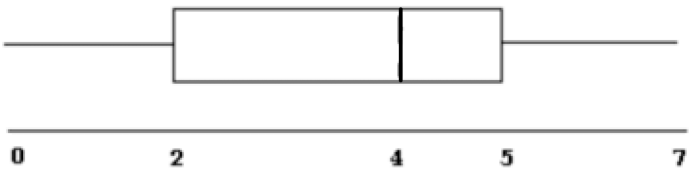
2. Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

(A) 46 kg **(B)** 149 kg **(C)** 214 kg **(D)** 252 kg

3. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0
(B) 1
(C) 2
(D) 3

4. Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

(C) There are no data values of 3.

(D) 50% of the data are 4.

5. We have still have not technically done any statistical analysis, only general data analysis. At what point could we say we have really done statistical analysis?

6. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

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(D) rang

8. We have been analyzing ungrouped data in our class. To analyze grouped data we must "ungroup" the data. Calculate the mean and standard deviation for the grouped data set below.

Start	End	Frequency
30	34	1
35	39	2
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9. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest *z*-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

(B) A score of 90 on a test with a mean of 86 and a standard deviation of 20.

(C) A score of 20 on a test with a mean of 15 and a standard deviation of 5.

10. Suppose that the mean of a set of data is 30 and the standard deviation is 4.2. Assume that the data needed to be rescaled by subtracting 5.1 from each data item. Compute the mean and the standard deviation of the new data set.

11. Data outliers can be easily identified by using which of the following?

(A) relative frequency histogram

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12. The data is {1, 6, 6, 11, 18, 18}. Can the data be considered normally distributed. Why?

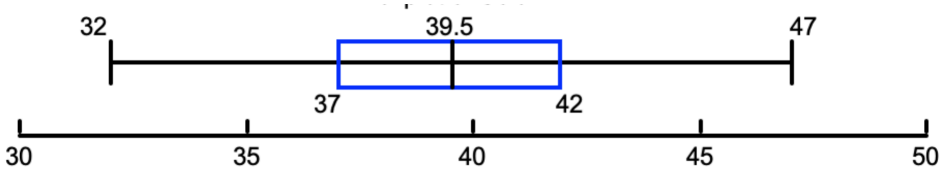
13. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

14. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range .

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

15. The box-and-whisker plot for the grouped data table in the previous problem is given below. Which of the following statements is true?



(A) 32 is an outlier.

(B) The IQR is 25.

(C) One half of all the data are between 32 and 37 .

(D) About 25% of all the data are greater than 42 .

16. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

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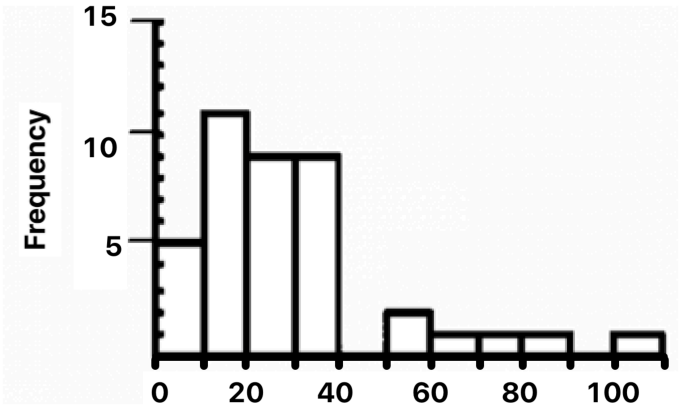
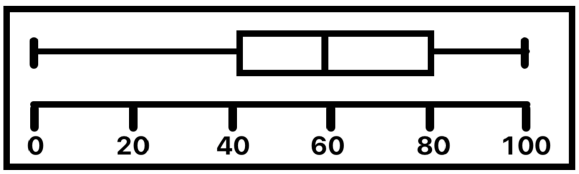
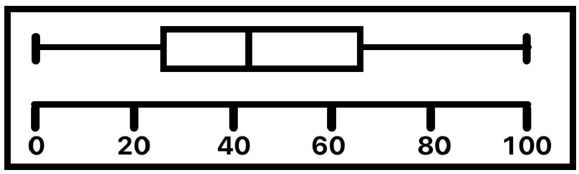


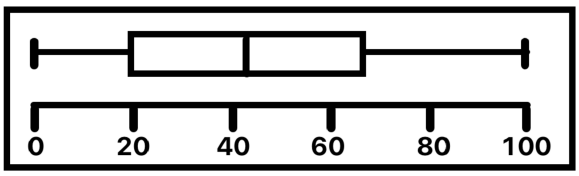
(A)



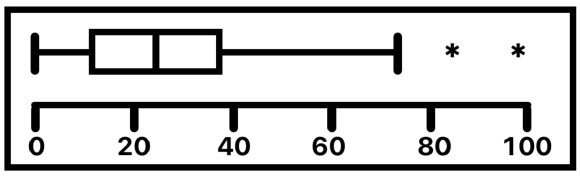
(C)



(B)



(D)



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21. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum

(B) to compensate for outliers

(C) to adjust the senseless measurement labeling

(D) to remove the degree of bias

MTH 150 Test 1
Fall 2025

Elementary Statistics

When finished submit your answers by following the appropriate link on ***my Assignments page****.*
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1. What is your test ID ? **T1300Q**

2. Suppose that the mean of a set of data is 30 and the standard deviation is 4.2. Assume that the data needed to be rescaled by subtracting 5.1 from each data item. Compute the mean and the standard deviation of the new data set.

3. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

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Start	End	Frequency
30	34	1
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6. The data is {1, 6, 6, 11, 18, 18}. Can the data be considered normally distributed. Why?

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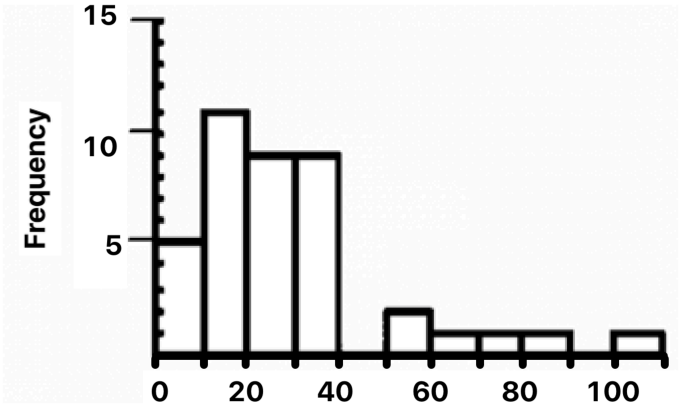
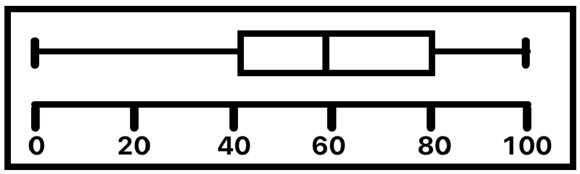
(A) 0
(B) 1
(C) 2
(D) 3

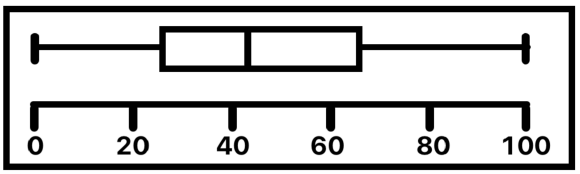
8. Which box plot was made from the histogram below?



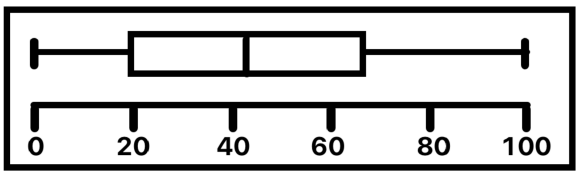
(A)



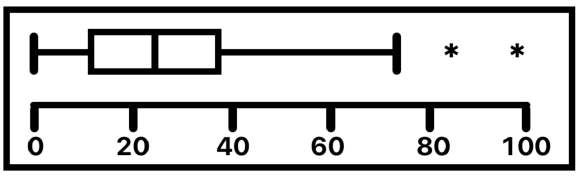
(C)



(B)



(D)



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10. Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

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- In comparing the hexokinase method with the glucose oxidase method for measuring glucose it was found that the mean and standard deviation for the hexokinase method were 120 mg/dl and 4.8 mg/dl respectively. The mean and standard deviation for the glucose oxidase method was 100 mg/dl and 4.0 mg/dl. Graphical analysis, however, seemed to indicate that there was not more variation present in the hexokinase method.

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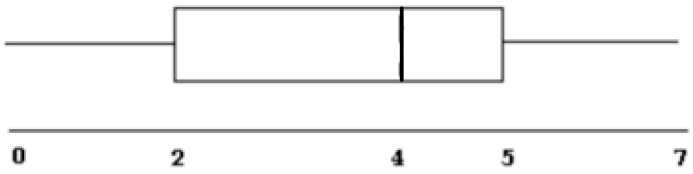
12. Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

(C) There are no data values of 3.

(D) 50% of the data are 4.

13. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest *z*-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

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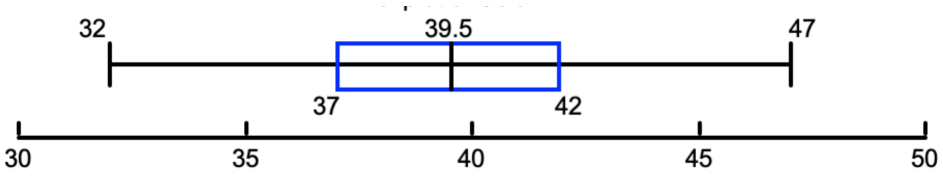
(C) A score of 20 on a test with a mean of 15 and a standard deviation of 5.

14. The box-and-whisker plot for the grouped data table in the previous problem is given below. Which of the following statements is true?



(A) 32 is an outlier.

(B) The IQR is 25.

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(D) About 25% of all the data are greater than 42 .

.**15.** Why must we square the deviations from the mean in calculating the standard deviation?

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16. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

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17. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range .

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

18. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

19. Which of the following is generally not affected by outliers?

(A) mean
(B) standard deviation
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20. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

21. Data outliers can be easily identified by using which of the following?

(A) relative frequency histogram
(B) modified box plot
(C) QQ plot
(D) frequency histogram

MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1472R**

2. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

3. Which of the following is generally not affected by outliers?

(A) mean
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4. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

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30	34	1
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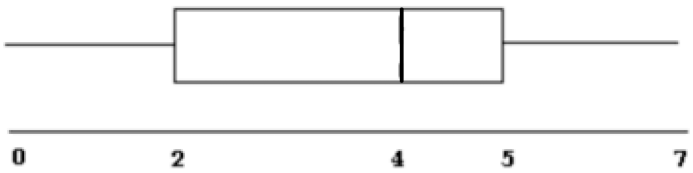
6. Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

(C) There are no data values of 3.

(D) 50% of the data are 4.

7. We have still have not technically done any statistical analysis, only general data analysis. At what point could we say we have really done statistical analysis?

8. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

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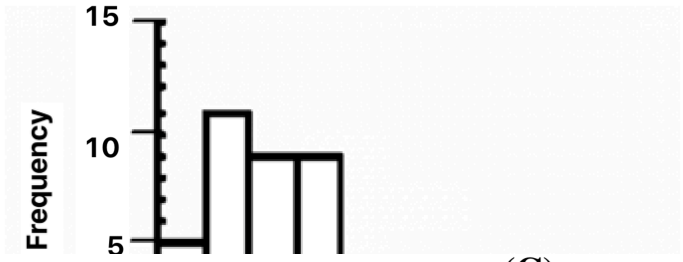

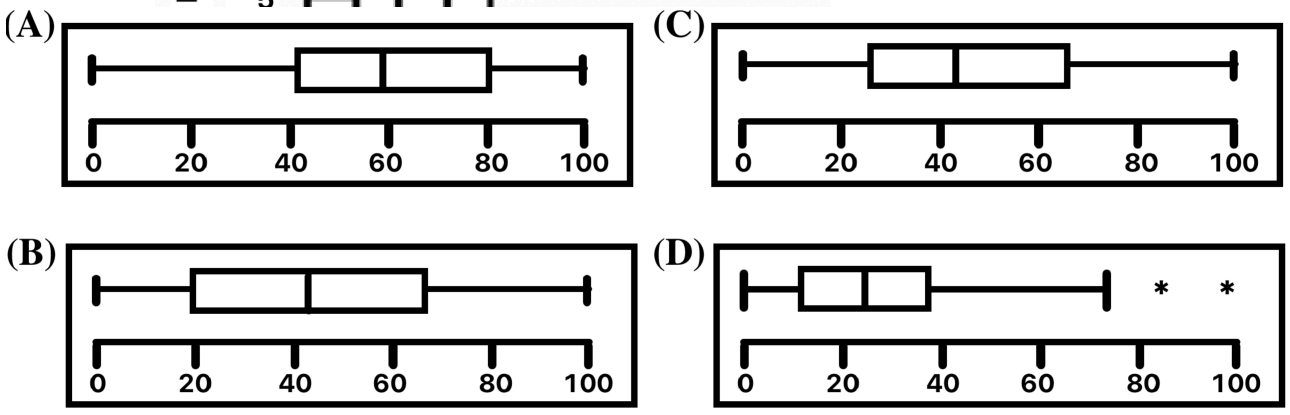

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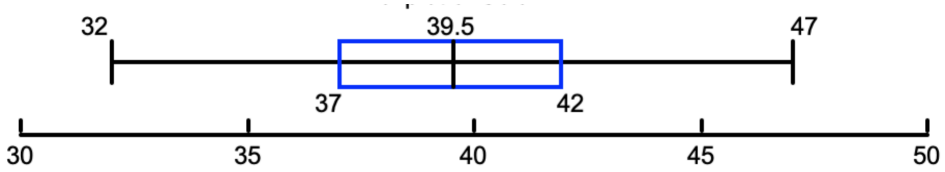

(A) 32 is an outlier.between 32 and 37 .

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(C) The IQR is 25.

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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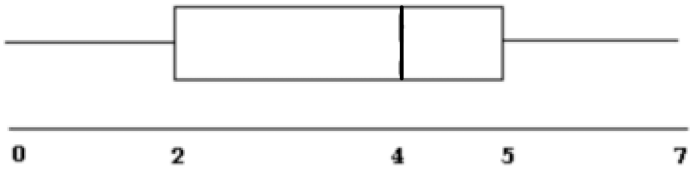
1. What is your test ID ? **T1447S**

2 Interpret the boxplot



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(C) There are no data values of 3.

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3. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0 **(C)** 2

(B) 1 **(D)** 3

4. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

5. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

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11. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum

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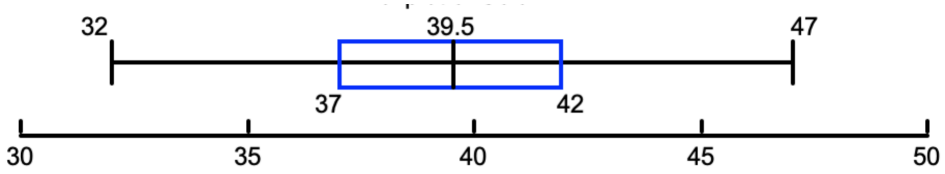

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(C) QQ plot

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14. Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

(A) 46 kg **(B)** 149 kg **(C)** 214 kg **(D)** 252 kg

15. We have still have not technically done any statistical analysis, only general data analysis. At what point could we say we have really done statistical analysis?

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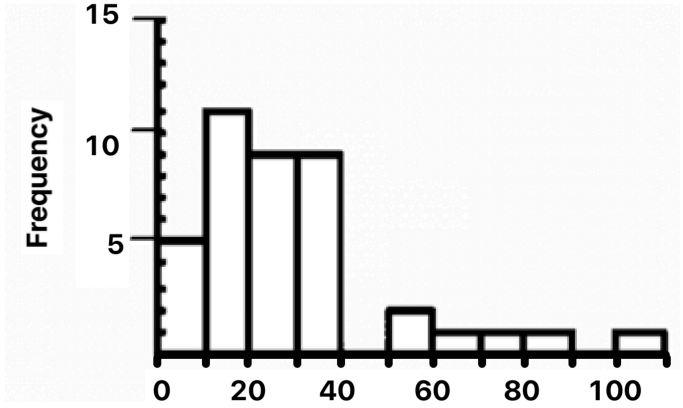
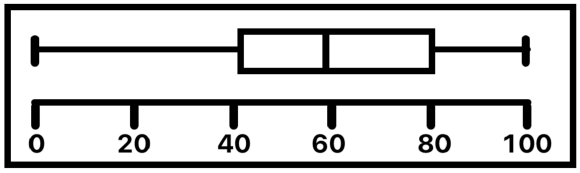
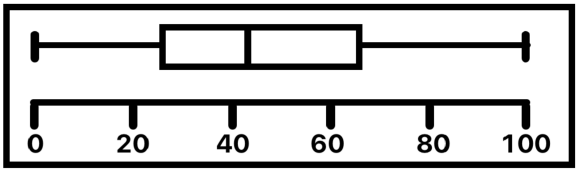


(A)



(C)



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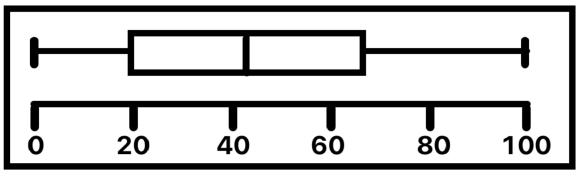

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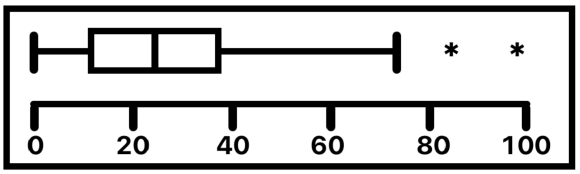

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20. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest z-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

(B) A score of 90 on a test with a mean of 86 and a standard deviation of 20.

(C) A score of 20 on a test with a mean of 15 and a standard deviation of 5.

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1329T**

2. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

3. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum
(B) to compensate for outliers
(C) to adjust the senseless measurement labeling
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(A) 0
(B) 1
(C) 2
(D) 3

5. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest *z*-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

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6. Which of the following is generally not affected by outliers?

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7. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

8. The data is {1, 6, 6, 11, 18, 18}. Can the data be considered normally distributed. Why?

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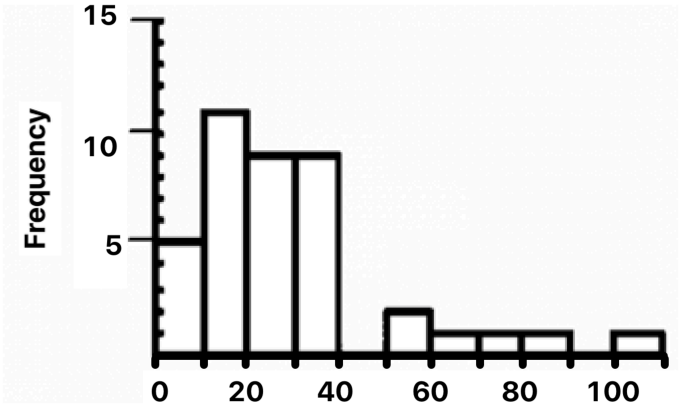
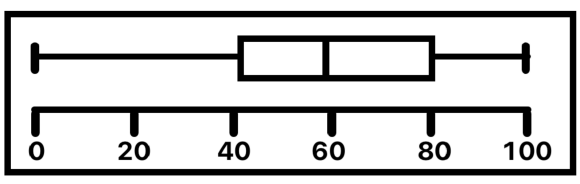
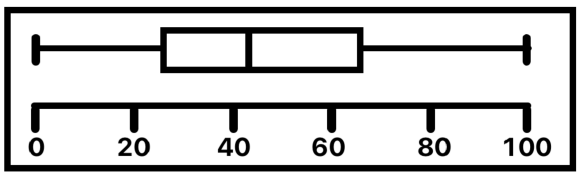


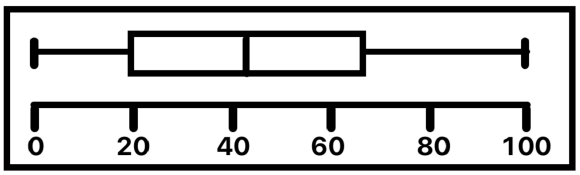
(A)



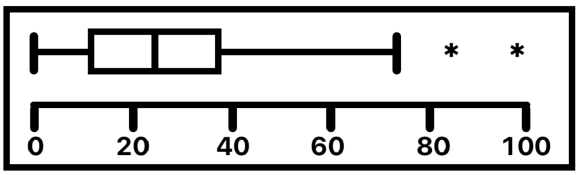
(C)



(B)



(D)



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(C) Neither

(D) Cannot be determined

15. We have been analyzing ungrouped data in our class. To analyze grouped data we must "ungroup" the data. Calculate the mean and standard deviation for the grouped data set below.

Start	End	Frequency
30	34	1
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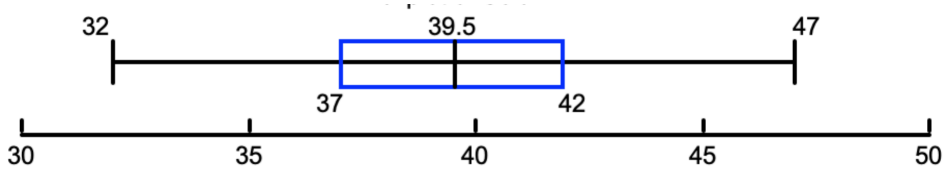
16. The box-and-whisker plot for the grouped data table in the previous problem is given below. Which of the following statements is true?



(A) 32 is an outlier.

(B) The IQR is 25.

(C) One half of all the data are between 32 and 37 .

(D) About 25% of all the data are greater than 42 .

17. Data outliers can be easily identified by using which of the following?

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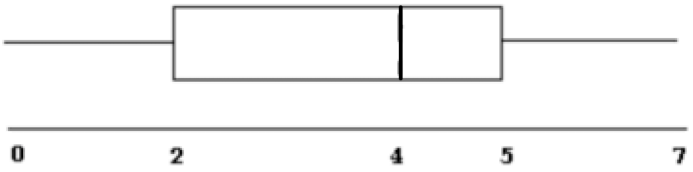
18. Interpret the boxplot



(A) 75% of the data are at most 5.

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(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1500U**

2. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum
(B) to compensate for outliers
(C) to adjust the senseless measurement labeling
(D) to remove the degree of bias

3. Data outliers can be easily identified by using which of the following?

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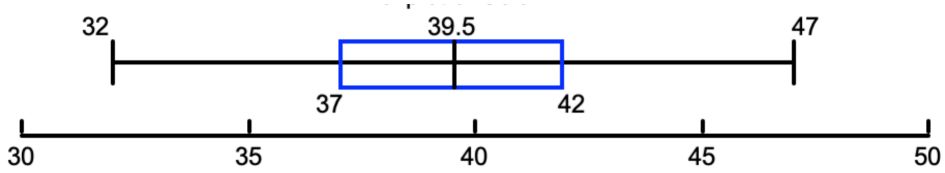

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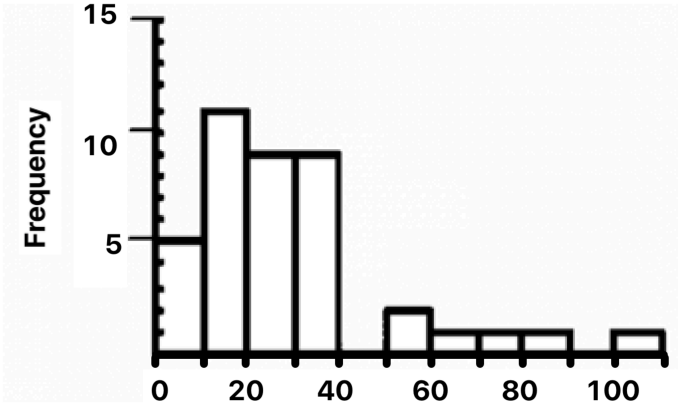
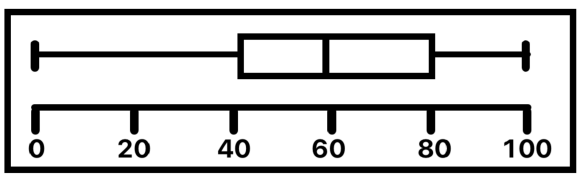
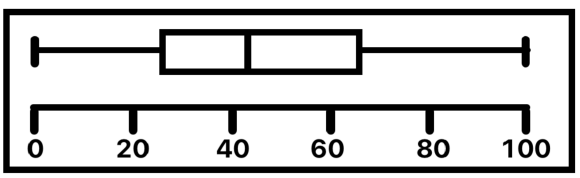


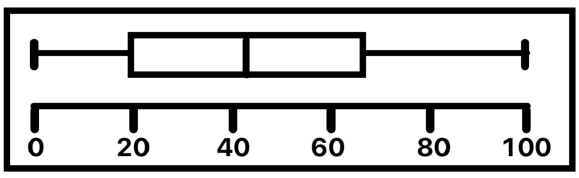
(A)



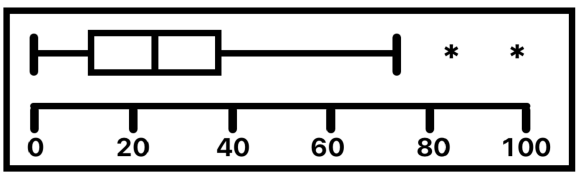
(C)



(B)



(D)



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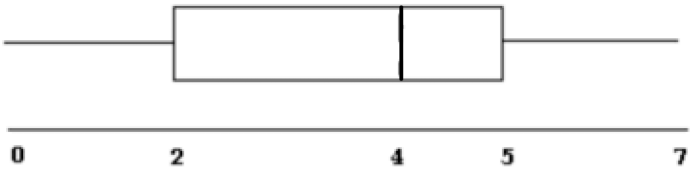

(A) 75% of the data are at most 5.

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1469V**

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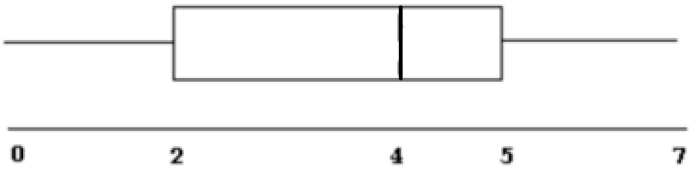

(A) 75% of the data are at most 5.

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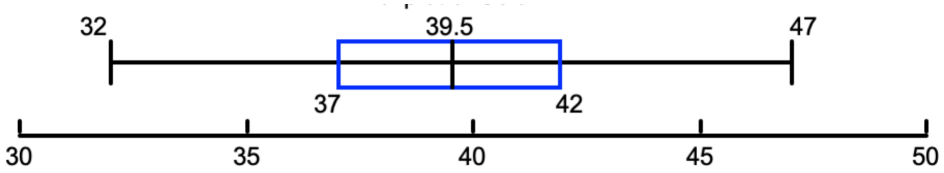

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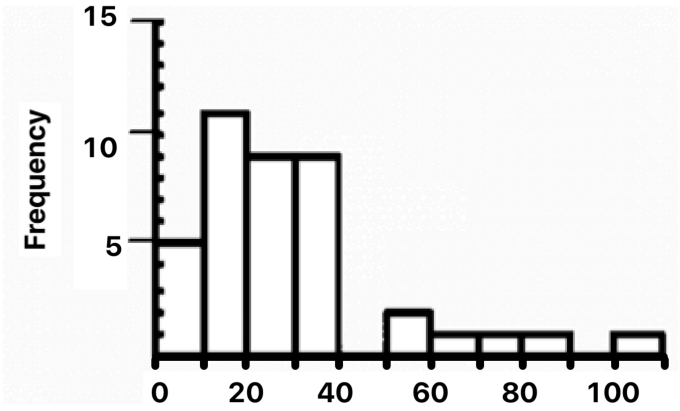
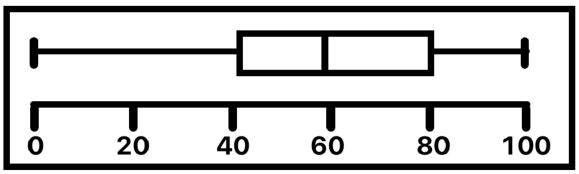


(A)



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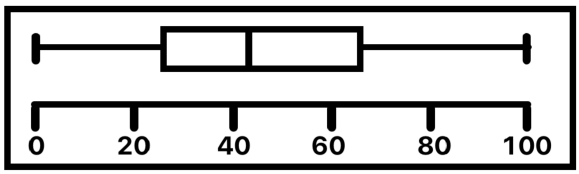

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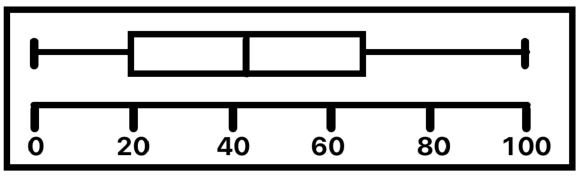
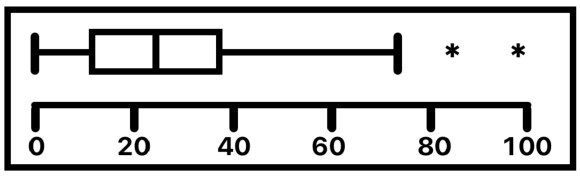


(D)



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MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1300W**

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35	39	2
40	44	2
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6. The data is {1, 6, 6, 11, 18, 18}. Can the data be considered normally distributed. Why?

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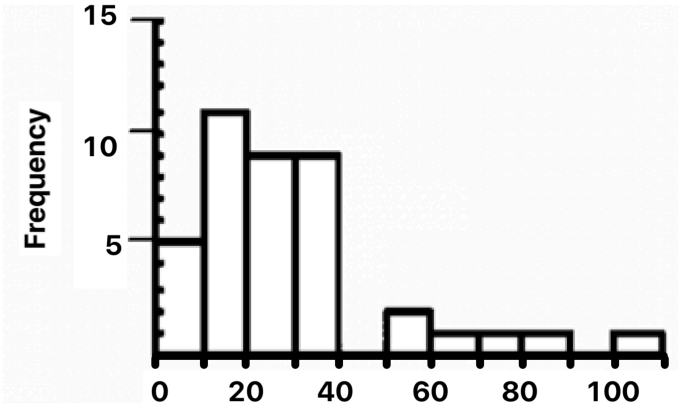
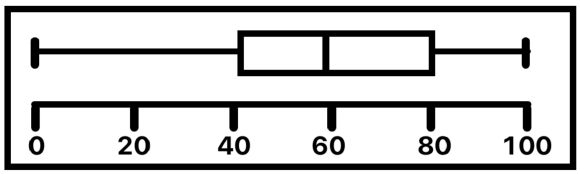
(A) 0
(B) 1
(C) 2
(D) 3

8. Which box plot was made from the histogram below?



(A)



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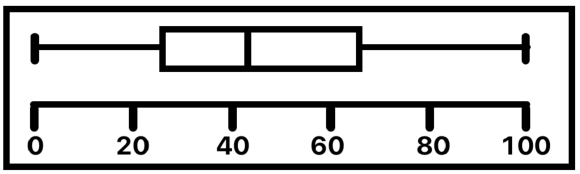

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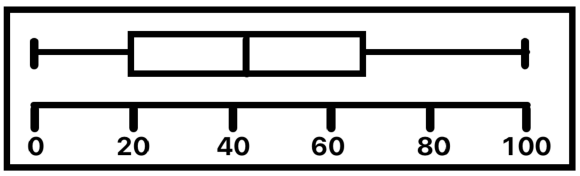
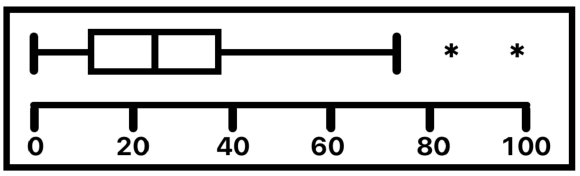


(D)



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10. Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

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- In comparing the hexokinase method with the glucose oxidase method for measuring glucose it was found that the mean and standard deviation for the hexokinase method were 120 mg/dl and 4.8 mg/dl respectively. The mean and standard deviation for the glucose oxidase method was 100 mg/dl and 4.0 mg/dl. Graphical analysis, however, seemed to indicate that there was not more variation present in the hexokinase method.

11. Which evaluation method really exhibited the greatest variability ?

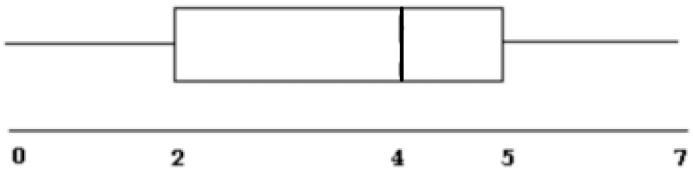
(A) Hexokinase method

(B) Glucose oxidase method

(C) Neither

(D) Cannot be determined

12. Interpret the boxplot



(A) 75% of the data are at most 5.

(B) There is about the same amount of data from 2 - 5 as there is from 5 - 7.

(C) There are no data values of 3.

(D) 50% of the data are 4.

13. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest *z*-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

(B) A score of 90 on a test with a mean of 86 and a standard deviation of 20.

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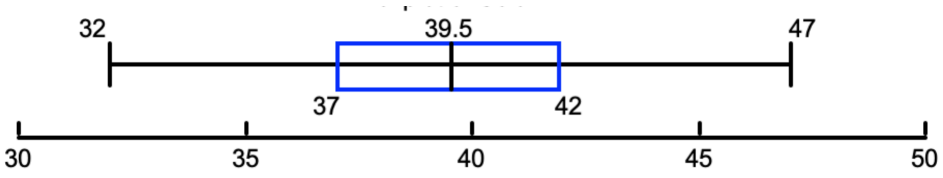
14. The box-and-whisker plot for the grouped data table in the previous problem is given below. Which of the following statements is true?



(A) 32 is an outlier.

(B) The IQR is 25.

(C) One half of all the data are between 32 and 37

(D) About 25% of all the data are greater than 42 .

.**15.** Why must we square the deviations from the mean in calculating the standard deviation?

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16. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

17. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range .

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

18. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

19. Which of the following is generally not affected by outliers?

(A) mean
(B) standard deviation
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20. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

21. Data outliers can be easily identified by using which of the following?

(A) relative frequency histogram
(B) modified box plot
(C) QQ plot
(D) frequency histogram

MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1395X**

2. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

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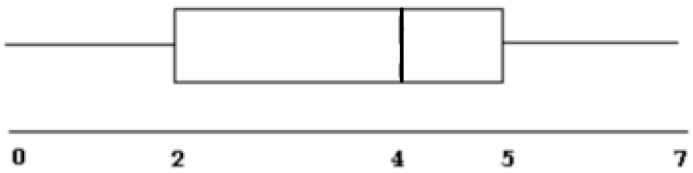

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10. Suppose that the mean of a set of data is 30 and the standard deviation is 4.2. Assume that the data needed to be rescaled by subtracting 5.1 from each data item. Compute the mean and the standard deviation of the new data set.

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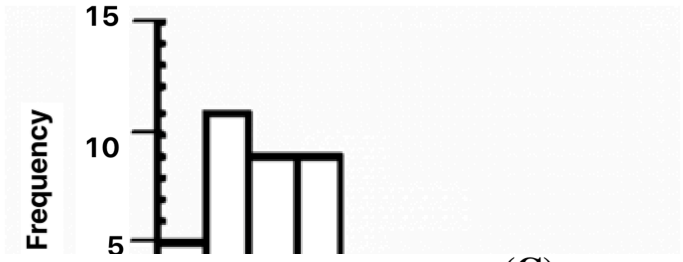

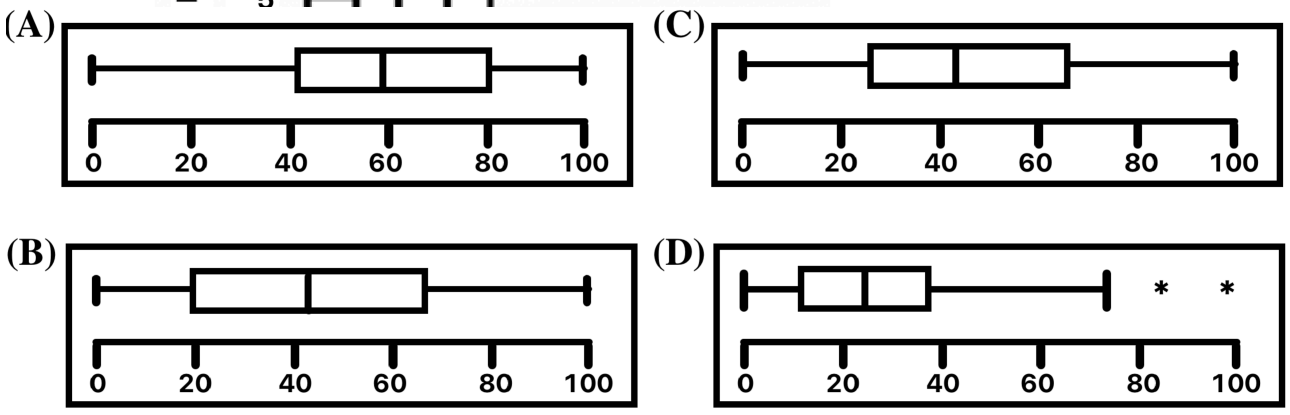

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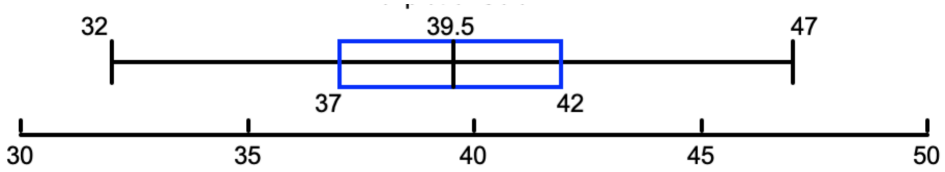

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19. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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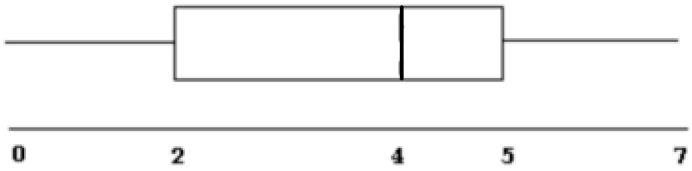
1. What is your test ID ? **T1331Y**

2 Interpret the boxplot



(A) 75% of the data are at most 5.

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(C) There are no data values of 3.

(D) 50% of the data are 4.

3. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0 **(C)** 2

(B) 1 **(D)** 3

4. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

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5. The data is {1, 6, 6, 11, 18, 18}. If we constructed a stem and leaf plot , what would be the "leaf" for the "stem" **1** .

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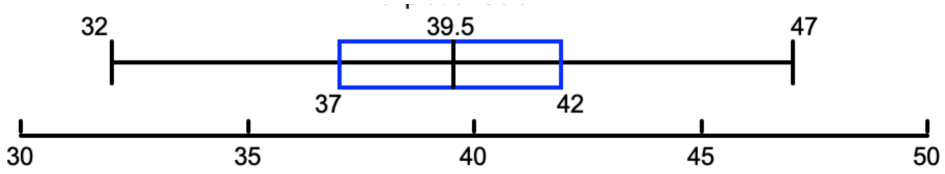

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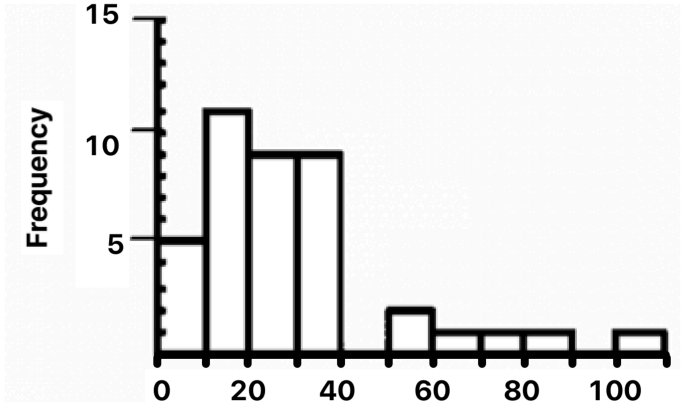
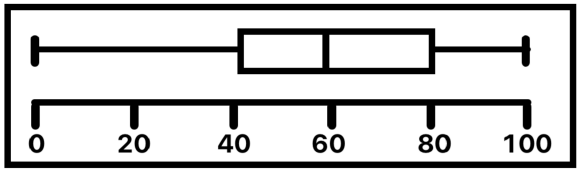
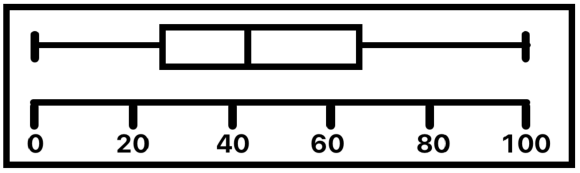


(A)



(C)



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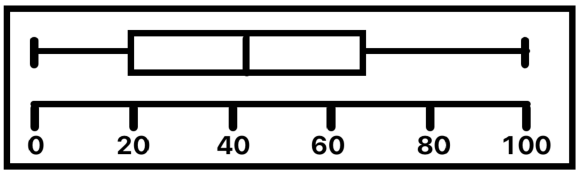

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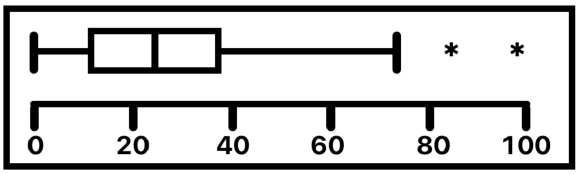

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1338Z**

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(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

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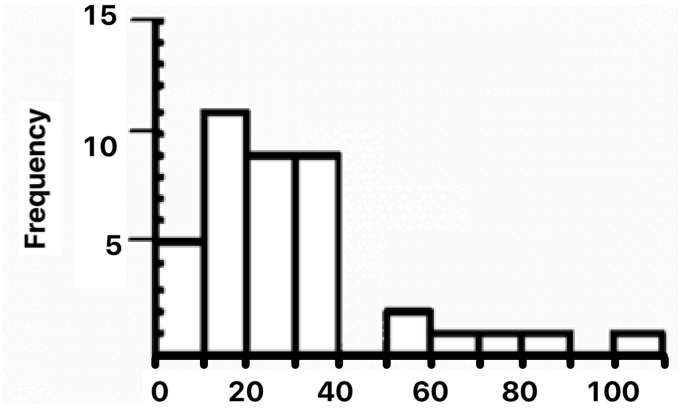

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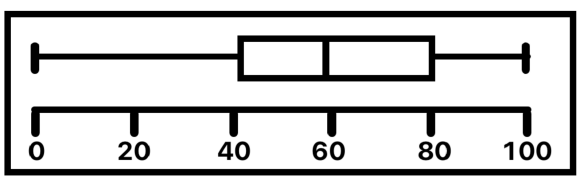
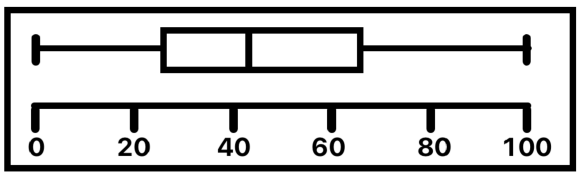


(C)



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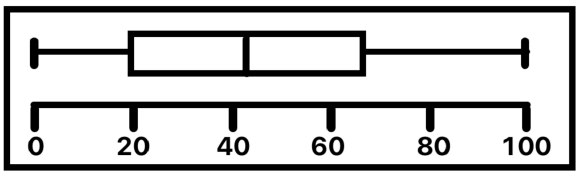
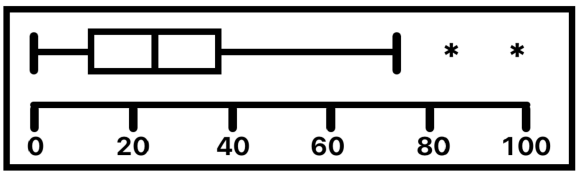


(D)



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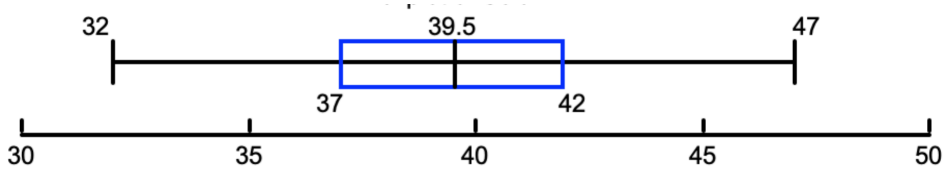

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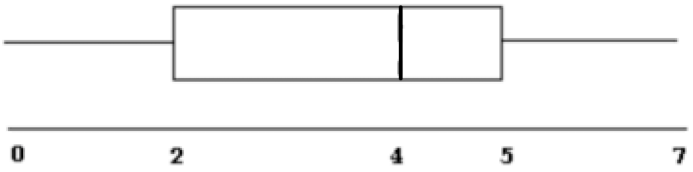

(A) 75% of the data are at most 5.

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21. Given National Counselor Examination (NCE) scores are approximately normally distributed with a mean of 50 and standard deviation of 21, the proportion of people with NCEs below 29 is:

(A) 50% **(B)** 84% **(C)** 16% **(D)** 34%

MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1450G**

2. Why must we square the deviations from the mean in calculating the standard deviation?

(A) to avoid a zero value in the sum
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3. Data outliers can be easily identified by using which of the following?

(A) relative frequency histogram
(B) modified box plot
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4. From 1984 to 1995, the winning scores for a golf tournament were 277, 280, 282, 284, and 270. Find the mean absolute deviation (MAD) for this data.

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6. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

7. Three students take equivalent stress tests. Which is the highest relative score (meaning which has the largest *z*-score value)?

(A) A score of 144 on a test with a mean of 128 and a standard deviation of 30.

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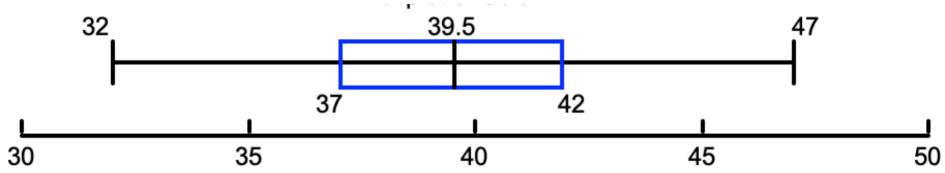

(A) 32 is an outlier.

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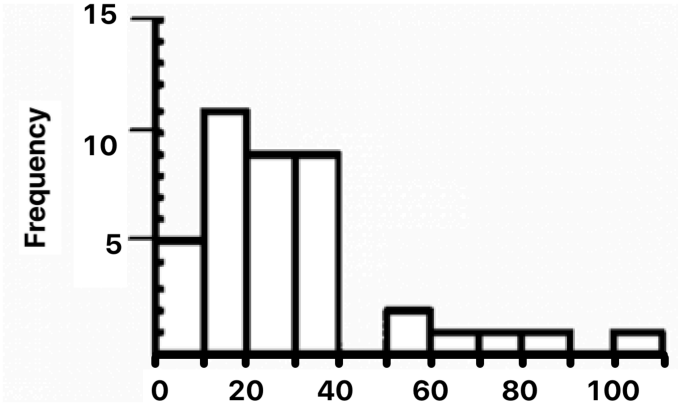
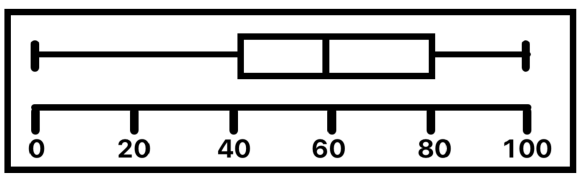
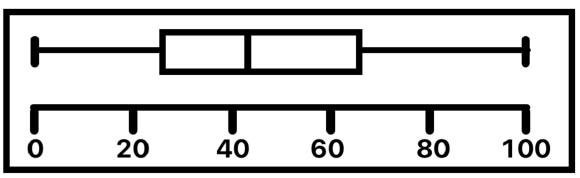


(A)



(C)



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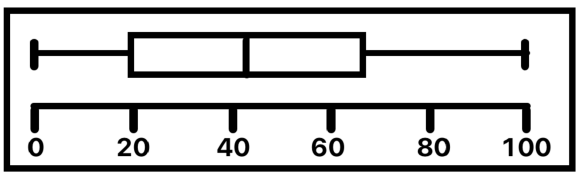

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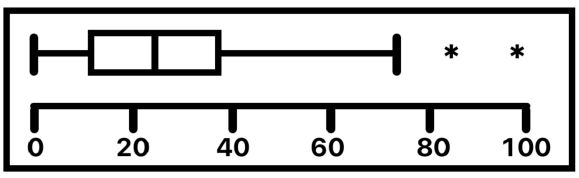

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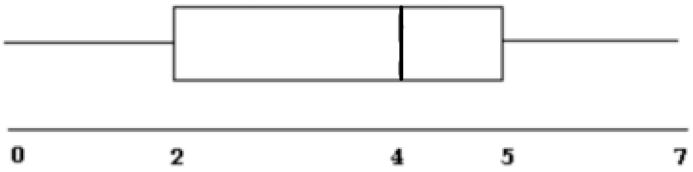

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14. We have been analyzing ungrouped data in our class. To analyze grouped data we must "ungroup" the data. Calculate the mean and standard deviation for the grouped data set below.

Start	End	Frequency
30	34	1
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- In comparing the hexokinase method with the glucose oxidase method for measuring glucose it was found that the mean and standard deviation for the hexokinase method were 120 mg/dl and 4.8 mg/dl respectively. The mean and standard deviation for the glucose oxidase method was 100 mg/dl and 4.0 mg/dl. Graphical analysis, however, seemed to indicate that there was not more variation present in the hexokinase method.

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21. Suppose that 10 measurements were taken and the mean was calculated to be 5. Assume next that one of the data items was 4. This was assumed to be an outlier as was discarded. What would be the mean of the remaining 9 numbers?

MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1477K**

2. Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

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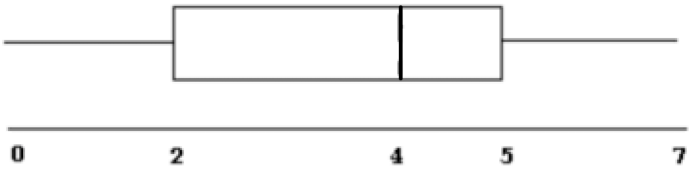

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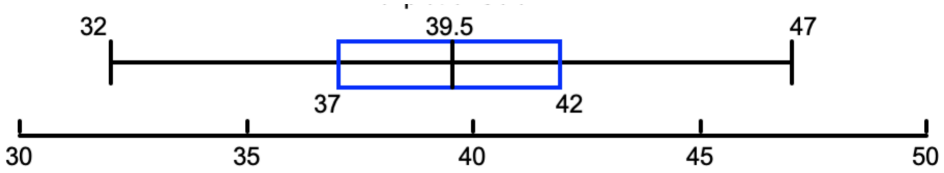

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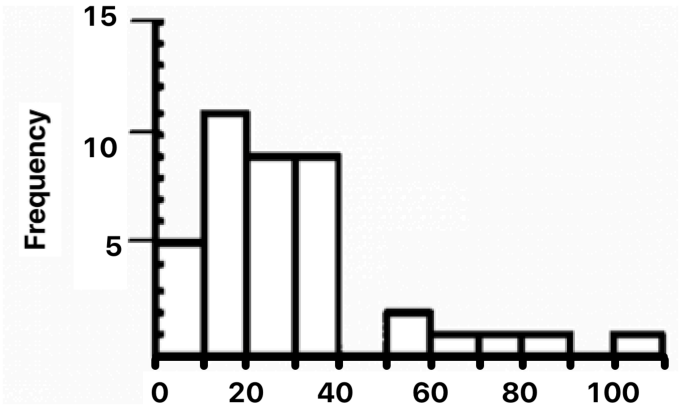
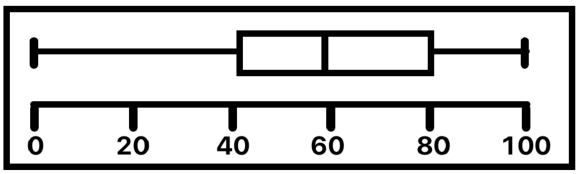


(A)



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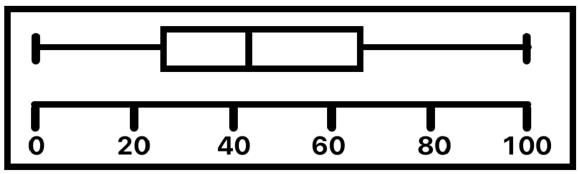

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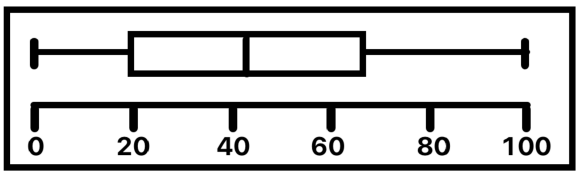

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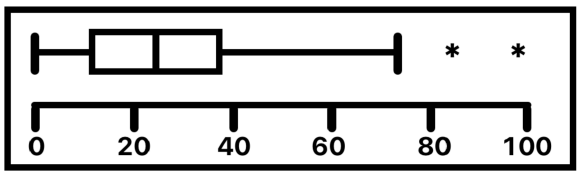

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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1. What is your test ID ? **T1280M**

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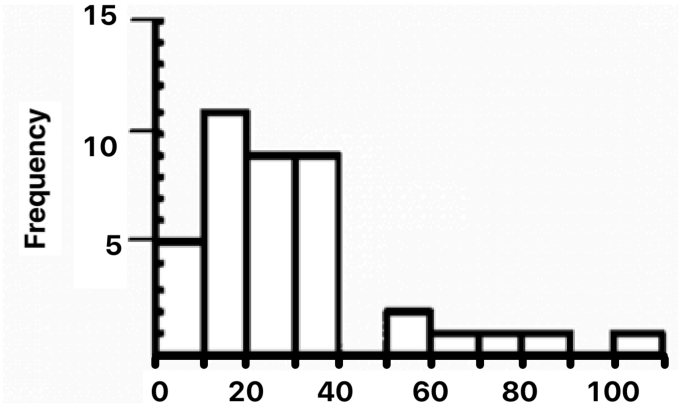
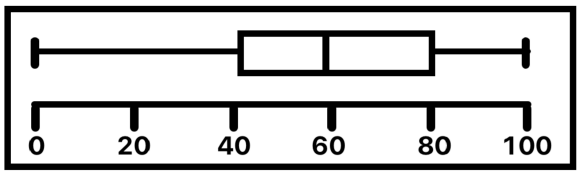


(A)



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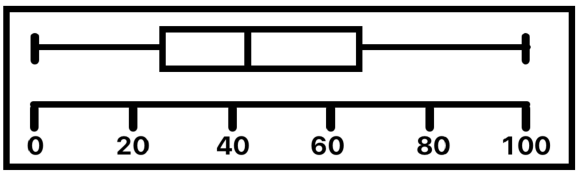

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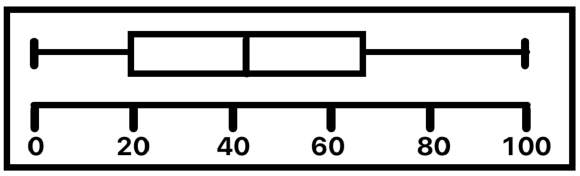

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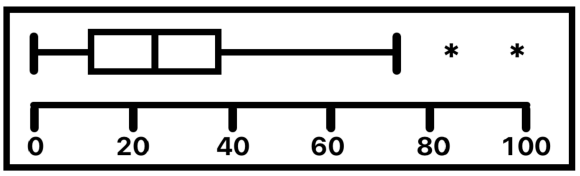

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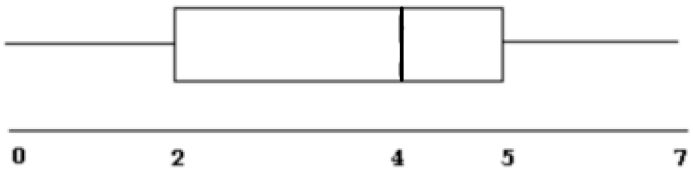

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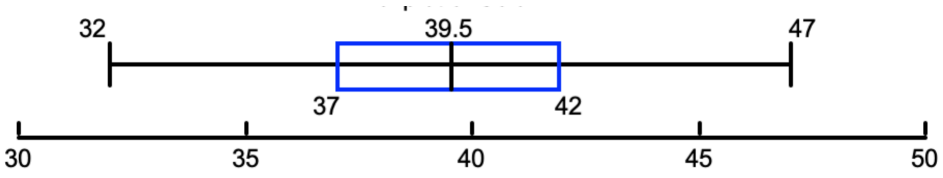

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MTH 150 Test 1
Fall 2025

Elementary Statistics

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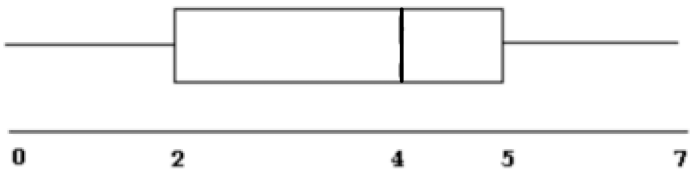

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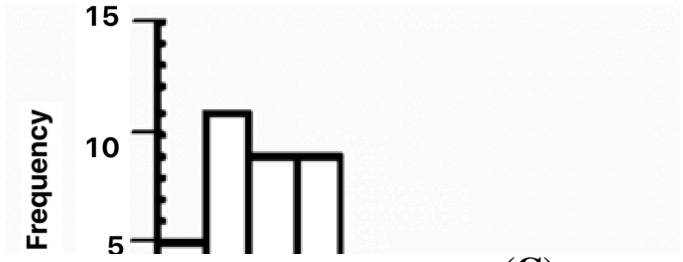
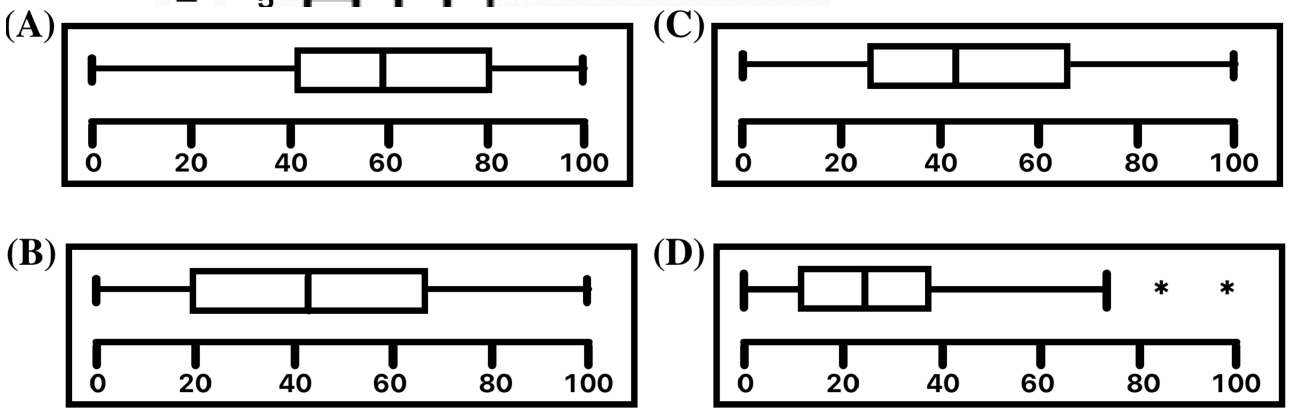
14. Which box plot was made from the histogram below?





- In comparing the hexokinase method with the glucose oxidase method for measuring glucose it was found that the mean and standard deviation for the hexokinase method were 120 mg/dl and 4.8 mg/dl respectively. The mean and standard deviation for the glucose oxidase method was 100 mg/dl and 4.0 mg/dl. Graphical analysis, however, seemed to indicate that there was not more variation present in the hexokinase method.

15. Which evaluation method really exhibited the greatest variability ?

(A) Hexokinase method
(B) Glucose oxidase method
(C) Neither
(D) Cannot be determined

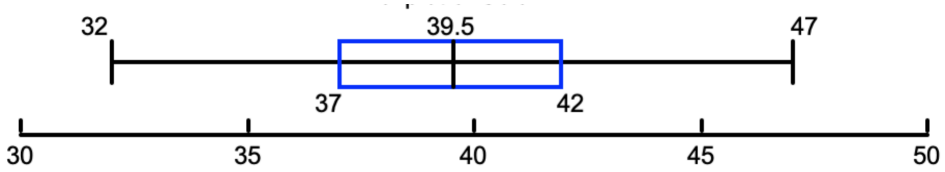
16 Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 130 and a variance of 40.0. A particular green sea turtle's weight has a z-score of +2.1. What is the weight of this green sea turtle? Round to the nearest whole number.

(A) 46 kg **(B)** 149 kg **(C)** 214 kg **(D)** 252 kg

17. The data is {1, 6, 6, 11, 18, 18}. How many values are more than two (2) standard deviations from the mean?

(A) 0
(B) 1
(C) 2
(D) 3

18. The box-and-whisker plot for the grouped data table in the previous problem is given below. Which of the following statements is true?



(A) 32 is an outlier.between 32 and 37 .

(B) About 25% of all the data are greater than 42

(C) The IQR is 25.

(D) One half of all the data are

19. The *NLN* Test used by the National League of Nursing standardizes with a mean of 100 and a standard deviation of 20. What would someone's *NLN* score be if their raw score was 80 from a group with a raw score mean of 82 and standard deviation of 5?

(A) 77 **(B)** 84 **(C)** 106 **(D)** 92

20. The data is {1, 6, 6, 11, 18, 18}. Find the inter-quartile range.

(A) 15 **(B)** 8 **(C)** 12 **(D)** 11.5

21. From 1984 to 1995, the winning scores for a golf tournament were 277, 280, 282, 284, and 270. Find the mean absolute deviation (MAD) for this data.