

20. If a histogram's shape looks similar to a bell curve (like a mirror) it is classified as Symmetric
21. If a histogram's shape has two defined peaks then it is said to be bimodal
22. The overall pattern of a distribution is determined by these four descriptions: Shape, Center, Spread, and Outliers
23. If the tail of a histogram's distribution is to the left, then the shape is said to be left skewed
24. The overall look of a data distribution is called the Shape

**Work Problems**—On a separate sheet of paper answer each question fully.

25. Find mean, median, and mode of the following data set, {11, 5, 9, 13, 8, 9, 9, 11, 10, 8}.  
9.3, 9, 9
26. In the statistics course tests are 50%, quizzes are 30%, and homework is 20% of a student's overall grade. Homework grades: {100, 80, 85, 100, 80, 50}, quiz grades: {80, 80, 100, 60, 100}, and test grades: {85, 98}. Find the overall statistics grade. 87.45
27. Find the 5# Summary and IQR of the following data set, {75, 80, 75, 77, 75, 80, 83, 80, 71, 70}.  
70 / 75 / 76 / 80 / 83 IQR: 5
28. James has taken the IQ test 8 times and his scores are 96, 118, 108, 105, 56, 107, 95, and 103. Find the standard deviation. 18.63
29. Find the standard deviation of the following data set {3, 8, 1, 6, 4, 12, 13, 5, 8} 4
30. Find mean, median, and mode of the following data set, {50, 45, 48, 59, 56, 53, 50, 48, 52, 49, 50, 51}  
50.9 50 50
31. Find the 5# Summary and IQR of the following data set, {35, 45, 42, 41, 25, 36, 27, 41, 34, 73, 26, 58, 29, 20, 28, 35, 48, 43, 42, 45}. 20 / 28.5 / 38.5 / 44 / 73 IQR: 15.5
32. Find the mean, median, and mode of the following data set {3, 8, 1, 6, 4, 12, 13, 5, 8}  
6.7, 6, 8
33. Find the standard deviation of the following data set, {11, 5, 9, 13, 8, 9, 9, 11, 10, 8}. 2.16
34. In the statistics course tests are 50%, quizzes are 25%, homework is 15%, and participation is 10% of a student's overall grade. Participation grades: {100, 100, 100, 100, 90}, Homework grades: {100, 80, 95, 100, 80, 70}, quiz grades: {90, 80, 100, 60, 98}, and test grades: {89, 91} Find the overall statistics grade. 89.3