Name: Due Date: Teacher: Parent Sign:

1. Dot plot A shows values: 2, 3, 3, 4, 5, 5, 6. Dot plot B shows values: 1, 3, 4, 4, 5, 7. Which dot plot has the higher median? Which has the greater range?

2. Histogram H1 has counts: 0-9: 2, 10-19: 5, 20-29: 3. Histogram H2 has counts: 0-9: 3, 10-19: 3, 20-29: 4. Which histogram shows more people in the 10-19 age group? Which histogram looks more uniform?

3. Box plot X has five?number summary: min 4, Q1 6, median 8, Q3 10, max 12. Box plot Y has five?number summary: min 5, Q1 6, median 9, Q3 11, max 14. Which box plot has the larger median? Which has the larger IQR (interquartile range)?

4. Dot plot C: 10, 12, 12, 12, 13, 14, 16. Dot plot D: 9, 11, 12, 13, 14, 15, 17. Which dot plot has the greater mode? Which has the larger spread (range)?

5. A histogram shows test scores binned 60-69: 2 students, 70-79: 6 students, 80-89: 9 students, 90-99: 3 students. Another histogram shows 60-69: 4, 70-79: 6, 80-89: 6, 90-99: 4. Which class has more students scoring 80-89? Which class appears to have scores more clustered around the middle?

6. Box plot A five?number summary: 2, 4, 7, 9, 11. Box plot B five?number summary: 1, 3, 7, 10, 13. Which has a smaller minimum? Which has the same median?

7. Dot plot E: 5, 6, 6, 6, 7, 8, 10. Dot plot F: 5, 5, 6, 7, 8, 9, 10. Which has a higher mode? Which dot plot is more skewed to the right?

8. Two histograms compare heights (in cm) of plants. Histogram A bins (10-19:1, 20-29:4, 30-39:5, 40-49:0). Histogram B bins (10-19:0, 20-29:3, 30-39:6, 40-49:1). Which histogram shows more very short plants (10-19)? Which shows more very tall plants (40-49)?

9. Box plot C: min 10, Q1 12, median 15, Q3 18, max 20. Box plot D: min 8, Q1 14, median 16, Q3 17, max 20. Which has the larger Q1? Which has the larger median?

10. Dot plot G: 20, 21, 22, 22, 23, 23, 24. Dot plot H: 18, 19, 20, 22, 25, 25, 26. Which has the higher median? Which has more repeated values (more clustering)?

11. A box plot shows test scores with five?number summary: min 40, Q1 60, median 75, Q3 85, max 95. A histogram of the same class shows most scores in the 70-79 and 80-89 bins. Do both displays suggest similar center? Explain briefly.

12. Two dot plots show the number of books read: Dot plot I: 0, 1, 1, 2, 2, 3, 4. Dot plot J: 1, 1, 1, 2, 3, 5, 6. Which student group has a higher mean number of books? (Estimate by eye: which set appears to have larger average)

13. Histogram A for shoe sizes: 3-4:1, 5-6:2, 7-8:5, 9-10:2. Histogram B: 3-4:0, 5-6:3, 7-8:6, 9-10:1. Which histogram has a larger mode bin? Which has more variability across bins?

14. Box plot E: min 15, Q1 18, median 20, Q3 22, max 30. There is an outlier at 45 shown as a point. How does the outlier affect the range? Does it affect the IQR?

15. Dot plot K: number of pets: 0, 0, 1, 1, 2, 3, 4, 8. Dot plot L: 0, 1, 1, 1, 2, 2, 3, 3. Which dot plot has an outlier? Which has the larger median?

16. Two histograms compare daily steps for two people over 10 days.

Person A bins (0-1999:2, 2000-3999:3, 4000-5999:4, 6000-7999:1)

Person B bins (0-1999:0, 2000-3999:2, 4000-5999:6, 6000-7999:2)

Which person has more days with 4000-5999 steps? Which person has higher typical step counts?

17. Box plot F five?number summary: 2, 5, 6, 9, 12. Box plot G: 0, 3, 6, 9, 12. Which box plot has the smaller minimum? Which has the same median?

18. Dot plot M: 30, 31, 32, 32, 33, 34, 36, 37. Dot plot N: 25, 30, 32, 33, 34, 35, 36, 38. Which has the greater mean? Which has the greater range?

19. Histogram comparing time spent on homework (minutes) for two classes:

Class A: 0-14:1, 15-29:4, 30-44:8, 45-59:2

Class B: 0-14:3, 15-29:6, 30-44:4, 45-59:2

Which class spends more time in the 30-44 minute bin? Which class has a distribution skewed toward shorter times?

20. Box plot H: min 6, Q1 9, median 12, Q3 14, max 18. Box plot I: min 5, Q1 8, median 12, Q3 16, max 20. Which has larger Q3? Which has the same median?

21. Dot plot O: 100, 102, 102, 105, 110, 115. Dot plot P: 95, 100, 103, 107, 112, 120. Which has the higher mean? Which has a larger range?

22. A histogram of monthly rainfall (mm) has bins: 0-19:1, 20-39:4, 40-59:10, 60-79:2. Another histogram shows: 0-19:4, 20-39:6, 40-59:5, 60-79:2. Which month group is most common in the first histogram? Which histogram has more months with low rainfall (0-39)?

23. Box plot J five?number summary for Group A: 12, 15, 18, 20, 24. Group B: 10, 17, 18, 19, 26. Which group has a higher minimum? Which group has the same median?

24. Two dot plots show times (minutes) to run a lap.

Dot plot Q: 60, 62, 62, 65, 65, 68, 70

Dot plot R: 55, 60, 63, 65, 67, 70, 75

Which has a faster median time? (Smaller median = faster.) Which is more spread out?

25. Histogram A of ages of museum visitors: 0-9:5, 10-19:10, 20-29:8, 30-39:2. Histogram B: 0-9:4, 10-19:8, 20-29:10, 30-39:3. Which histogram suggests a younger crowd? Which has more visitors in the 20-29 bin?

26. Box plot K: min 3, Q1 5, median 7, Q3 9, max 11. Box plot L: min 2, Q1 4, median 6, Q3 8, max 10. Which box plot has larger values overall (compare medians and quartiles)? Which has the same IQR?

27. Dot plot S: 14, 15, 15, 16, 17, 17, 18, 19. Dot plot T: 10, 12, 14, 16, 18, 20, 22, 24. Which has a larger mean? Which shows more symmetry?

28. Two histograms of class scores. Class A: 50-59:1, 60-69:4, 70-79:8, 80-89:5, 90-99:2. Class B: 50-59:2, 60-69:6, 70-79:6, 80-89:4, 90-99:2. Which class has more high scores (80 or above)? Which class's scores are more concentrated in the 70-79 bin?

29. Box plot M: min 0, Q1 2, median 4, Q3 7, max 10. Box plot N: min 1, Q1 3, median 5, Q3 6, max 11. Which has the larger maximum? Which has a larger IQR?

30. Dot plot U: 7, 7, 7, 8, 9, 10, 11. Dot plot V: 4, 6, 7, 8, 9, 10, 12. Which has a lower median? Which has a higher mode?

31. A box plot shows five?number summary: min 20, Q1 25, median 30, Q3 35, max 40. Another display is a histogram showing many values in 30-34. Are the two displays consistent about the center? Explain.

32. Two dot plots show the weights (kg) of small animals.

Dot plot W: 1, 1, 2, 2, 2, 3, 4

Dot plot X: 0, 1, 2, 3, 3, 3, 5

Which has the same median? Which has a greater spread (range)?

33. Histogram A for quiz scores: 40-49:0, 50-59:2, 60-69:5, 70-79:7, 80-89:6. Histogram B: 40-49:1, 50-59:4, 60-69:6, 70-79:6, 80-89:3. Which histogram suggests higher overall performance? Which has more scores above 70?

34. Box plot O: min 8, Q1 10, median 14, Q3 16, max 20. Box plot P: min 8, Q1 9, median 12, Q3 19, max 22. Which has a larger Q3? Which likely has more variability in the upper half?

35. Dot plot Y: 3, 4, 4, 5, 6, 7, 9, 9. Dot plot Z: 2, 4, 5, 6, 7, 8, 9, 10. Which has more repeated highest values? Which has the larger range?

36. Two histograms for lengths (cm) of fish:

Tank A bins: 0-4:3, 5-9:7, 10-14:5

Tank B bins: 0-4:1, 5-9:9, 10-14:5

Which tank has more small fish (0-4)? Which tank has a larger middle bin count?

37. Box plot Q five?number summary: min 11, Q1 13, median 15, Q3 18, max 21. Box plot R: min 7, Q1 12, median 15, Q3 19, max 24. Which has the same median? Which has the larger maximum?

38. Dot plot AA: 50, 52, 53, 53, 55, 57, 60. Dot plot BB: 45, 50, 52, 54, 56, 60, 65. Which has the larger mean? Which has the larger range?

39. A histogram shows temperatures in a town: 10-14 degC: 2 days, 15-19 degC: 5 days, 20-24 degC: 12 days, 25-29 degC: 1 day. Another histogram shows temperatures: 10-14:4, 15-19:10, 20-24:6, 25-29:0. Which histogram indicates more hot days (20-29)? Which shows a distribution centered at a higher temperature?

40. Box plot S: min 0, Q1 1, median 1, Q3 2, max 5. There are two 0 values in the data. Another box plot T: min 0, Q1 0, median 1, Q3 2, max 6. Which box plot has a lower Q1? Which has a larger maximum?

41. Dot plot CC: 18, 18, 19, 20, 21, 22, 22, 23. Dot plot DD: 12, 15, 18, 20, 22, 24, 26, 28. Which plot has a higher median? Which shows more clustering?

42. Two histograms comparing grocery receipts (dollars).

Store A bins: 0-9:2, 10-19:6, 20-29:8, 30-39:4

Store B bins: 0-9:4, 10-19:8, 20-29:6, 30-39:2

Which store has more receipts in 20-29? Which store has more small receipts (0-9)?

43. Box plot U five?number summary: 3, 6, 9, 12, 15. Box plot V: 1, 5, 9, 13, 17. Which have the same median? Which has a smaller minimum?

44. Dot plot EE: 1, 2, 2, 2, 3, 5, 9. Dot plot FF: 0, 1, 2, 3, 4, 5, 10. Which has a larger mean? Which has an outlier?

45. Histogram of hours spent watching TV per week:

Household A: 0-4:3, 5-9:5, 10-14:6, 15-19:2

Household B: 0-4:1, 5-9:4, 10-14:8, 15-19:3

Which household has more families watching 10-14 hours? Which household seems to have higher average viewing time?

46. Box plot W five?number summary: 50, 55, 60, 70, 80. Box plot X: 45, 50, 60, 65, 85. Which has the same median? Which has a larger maximum?

47. Dot plot GG: 40, 42, 44, 46, 48, 50. Dot plot HH: 35, 40, 43, 46, 49, 55. Which has the higher mean? Which has the greater range?

48. Two histograms of ages in two neighborhoods.

Neighborhood A: 0-9:10, 10-19:15, 20-29:5, 30-39:2

Neighborhood B: 0-9:5, 10-19:10, 20-29:12, 30-39:5

Which neighborhood has more children (0-9)? Which has more young adults (20-29)?

49. Box plot Y: min 2, Q1 4, median 6, Q3 7, max 9. A student says "box plot Y is skewed left." Is that likely correct? Explain using the five?number summary.

50. Dot plot II: 100, 105, 105, 110, 115, 120, 125. Histogram of the same data grouped into bins 100-109:3, 110-119:2, 120-129:2. Which display makes the repeated values (mode) easiest to see? Which display makes it easiest to see the overall range?