

PACKETS

Incorrect: _____

Name _____ Class _____ Date _____

Weekly Practice Packet #2

Dot Plots, Frequency Tables, and Histograms



The weekly practice packet is due on _____.

Complete the problems in the packet throughout the week as you learn more about each skill or concept. It is important that you try your best and persevere when solving each problem or answering each question.

The weekly practice packet counts as a 10-point practice grade.

If you get stuck do the following:

1. Refer to your class notes, practice sheets, and warm-ups.
2. Refer to your textbook. The corresponding textbook pages are noted at the beginning of each section.
3. Take a break and try the problem or question again.
4. Attend Mrs. Brightman's extra help session.
5. Still having trouble? Write a statement stating why you are having difficulty on the problem or question.

PART I: Vocabulary

Directions: Create flashcards for the vocabulary words listed below. The definitions for these words can be found in class notes and in the glossary of the textbook. These words appear throughout the packet and the flashcards will be most useful in becoming more familiar with their definitions.

dot plot **frequency tables** **center** **cluster**

skewed left **skewed right** **spread** **gap**

symmetrical data **mode** **histogram** **peak**

product **factors**

PACKETS

PART II: Dot Plots and Frequency Tables (Textbook pages 319-320)

1. Explain how a dot plot is similar to a frequency table?
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2. Use the following data to create a frequency table and a dot plot below.

The ages for required school attendance in ten states are shown in the table below:

6	7	6	5	7	6	8	6	5	7
---	---	---	---	---	---	---	---	---	---

- a. Make a frequency table for the data.

	Frequency
5	
6	
7	
8	

- b. Make a dot plot.

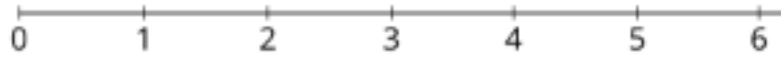


PACKETS

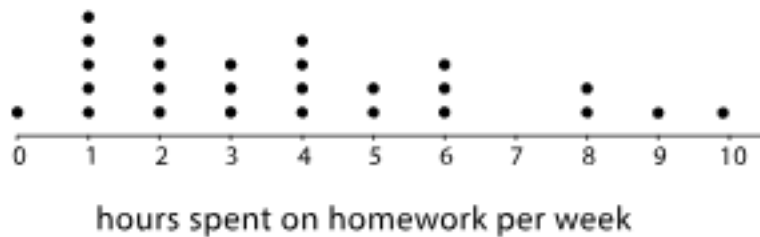
3. Fifteen customers in a pizza shop were asked, “How many toppings did you add to your cheese pizza?” Their responses are shown in the table below.

1	2	1	3	0	1	1	2	0	3	0	0	1	2	2
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

- a. Explain why you can use a dot plot to represent this data.
- b. Make a dot plot of the pizza toppings.



4. The dot plot below represents responses to the question: “How many hours do you generally spend on homework each week?”

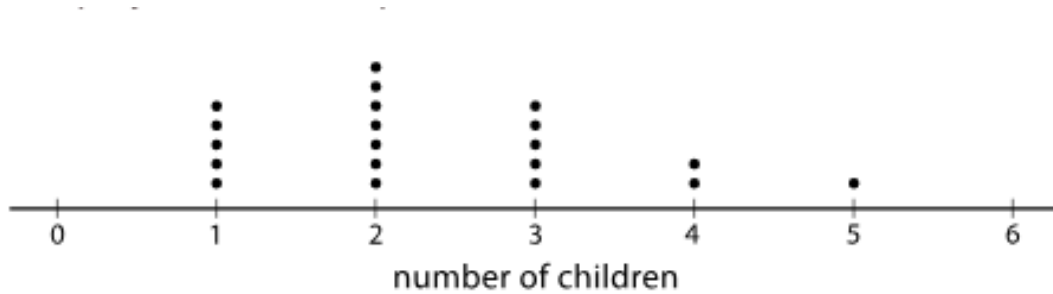


- a. Based on the dot plot, how do you know a statistical question was asked?
- b. Someone made the comment; “In general, these students spend roughly the same number of hours doing homework.” Do you agree? Explain your reasoning.

PACKETS

5. A group of students were asked, “How many children are in your family?”

The responses are displayed in the dot plot below.



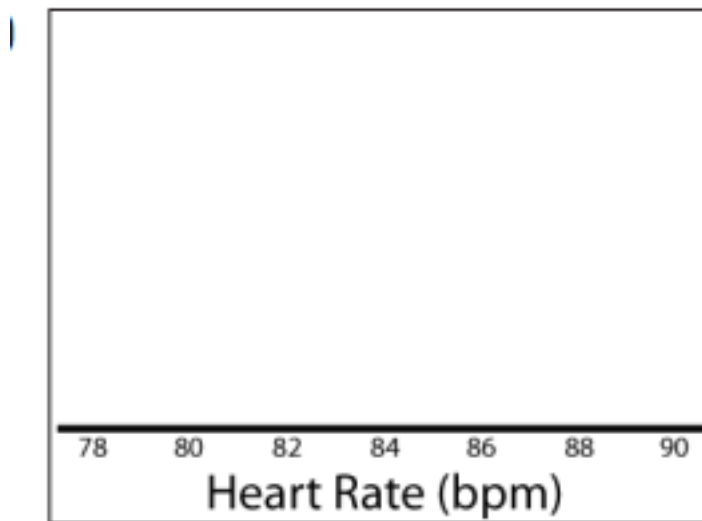
- a. How many students responded to the survey?
- b. Describe the distribution of the data in the dot plot.
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6. Use the data to create a dot plot and then answer the answers about its distribution.

Resting heart rate (bpm) of 6th graders

85	86	83	86	83	87	84	87	80	82	86	85	81	87	79	85	83	88	84	83	86
84	88	85	84	87	81	83	86	84	83	81	88	85	83	86	89	84	82	82	90	85



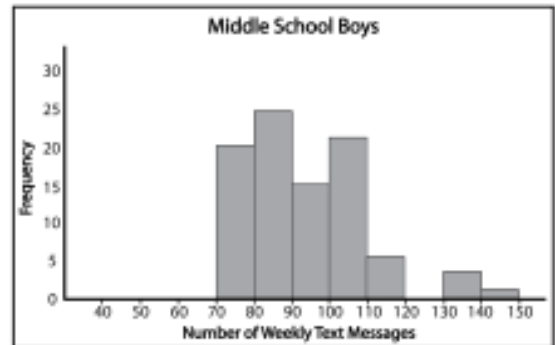
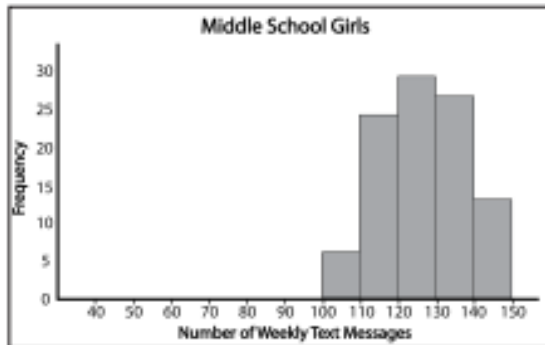
- a. What heart rate is most common?
- b. What is a typical heart rate for a sixth grader? Explain your reasoning.

PACKETS

PART III: Histograms (Textbook pages 328-329)

7. How are a bar graph and histogram similar? How are they different?

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8. Use the histograms below to answer the following questions.



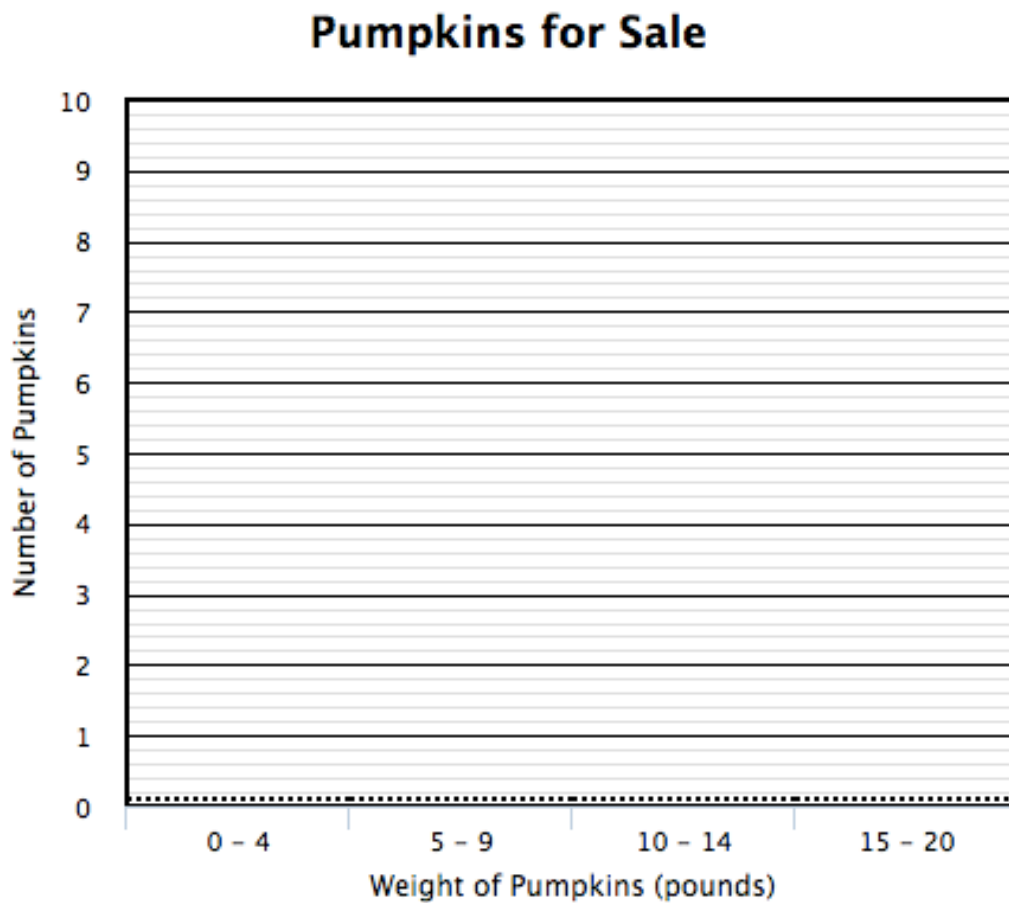
- a. Most girls send how many text messages per week?
- b. Most boys send how many text messages per week?
- c. Do girls or boys typically text more? Explain your reasoning.
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PACKETS

9. The table below shows the weights, in pounds, of 15 pumpkins that are for sale at a farm.

5	18	6	12	10
8	13	7	9	4
16	4	11	7	15

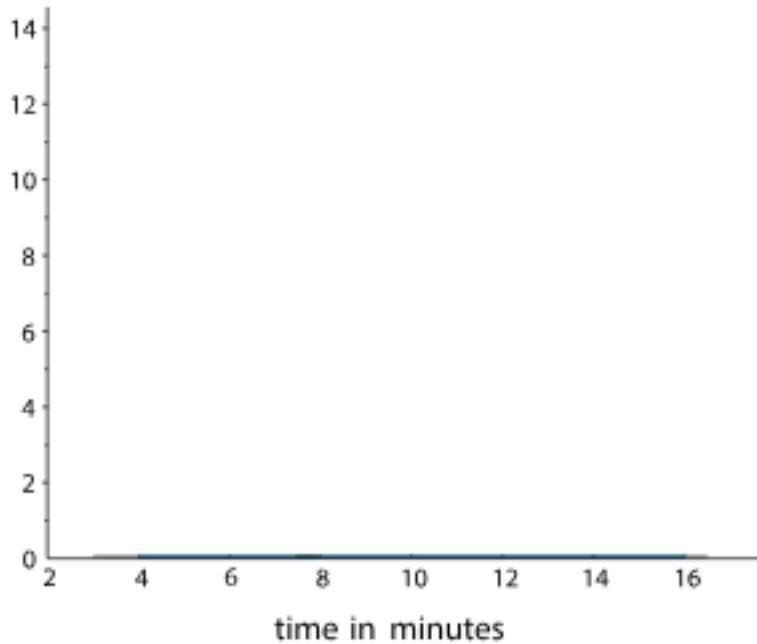
Create a histogram to represent the data.



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10. The table below shows the times, in minutes, it took 40 sixth-grade students to run 1 mile.

Construct a histogram for the data in the table.



time (minutes)	frequency
4 to less than 6	1
6 to less than 8	5
8 to less than 10	13
10 to less than 12	12
12 to less than 14	7
14 to less than 16	2

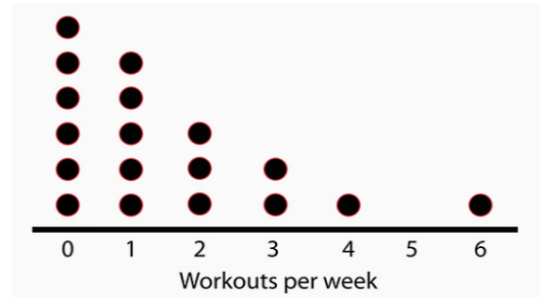
PART IV: Shape of Distributions (Textbook pages 339-340)

11. Describe what it means when a data set is said to be symmetrical.
Draw an example of a dot plot that has symmetrical data.

PACKETS

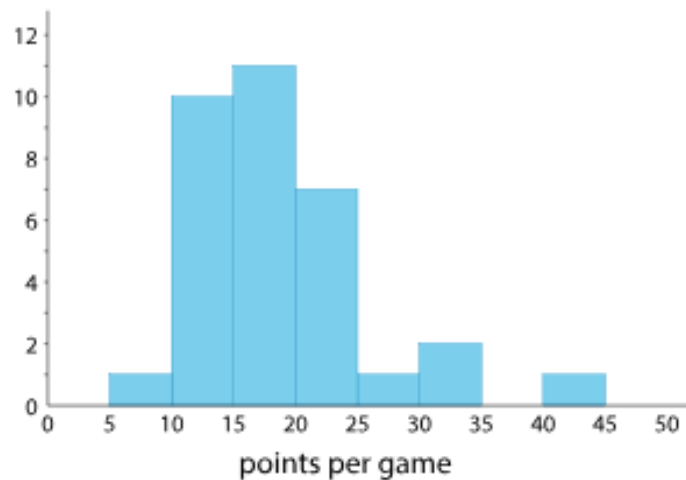
12. A student described the data set below as skewed left and clustered around 0 and 1.

a. Is the student correct?



b. Explain your reasoning.

13. The histogram below shows the number of points scored by a college basketball player during the 2008 season.



a. Is the data symmetrical or skewed left or right?

b. Are there any gaps or peaks in the data? If so, where?

c. Where is the center of the data?

PACKETS

PART V: Multiplying Decimals (Textbook pages 25 - 26)

Directions: Find the following products showing all of your thinking in the space provided.

14. 3.5×4.9

15. $(1.43)(8.4)$

16. 9.2×1.156

PACKETS

17. There is 0.2 gram of calcium in 1 serving of cheddar cheese. How much calcium is in 3.25 servings of cheddar cheese?



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18. Find the mistake in the student's work below and provide the correct product.

$$\begin{array}{r} 4.67 \\ \times \underline{1.50} \\ 0.00 \\ 323.50 \\ \underline{467.00} \\ 790.50 \end{array}$$