

Applied Algebra

Review Ch. 1

Quiz 1.4-1.7 Mon.

Test Tues. Ch. 1

(MCT upgrade max. 80%)

Write an algebraic expression.

11. the product of 5 and n

12. the sum of 2 and three times x

$$5n = 5 \cdot n$$

$$2 + 3x$$

$$3 \cdot x$$

Write a verbal expression for each algebraic expression.

5 $32 - b$

$17 + 15 - b$

6 $(y \div 4) + 9$

9

Write an equation for each sentence.

13. Six less than two times y equals 14.

take off 6

$$-1 \quad 6 - 2y = 14$$

$$2y - 6 = 14$$

$$10x + 1x = 11x$$

19. Find the value of $3ac - b$ if $a = 6$, $b = 9$, and $c = 1$.

$$\begin{aligned} 3 \cdot 6 \cdot 1 - 9 \\ 18 - 9 \\ 9 \end{aligned}$$

Name the property shown by each statement. Then simplify.

20. $6 + (7 + b) = (6 + 7) + b$ *assoc*

21. $2 \cdot c \cdot 10 = 2 \cdot 10 \cdot c$ *comm*

Simplify each

26. $4(8 + y)$

28. $10x + \underline{1}x = 11x$

Use the four-step plan to solve each problem.

32. **Finance** Mr. Rockwell deposited \$1000 in an account that pays 2% interest. How much money would he have in the account after ten years?

$$i = p \cdot r \cdot t$$

$$i = 1000 (.02)(10)$$

$$i = 200 \quad \begin{array}{r} 1000 \\ \underline{200} \end{array}$$

$$\$1200$$

33. **School** Jamal is typing a three-page report with approximately 400 words per page for school. He thought he could finish typing the report in 2 hours. After $1\frac{1}{2}$ hours, he had finished 2 pages.

a. How many words are in his paper?

1200 words

b. About how many words had Jamal typed in $1\frac{1}{2}$ hours?

800 words

- **Lesson 1-6** Collect and organize data using sampling and frequency tables.

Make a frequency table for the data {1, 4, 3, 4, 0, 2, 3, 1, 0, 2, 0, 2, 0, 4, 0, 0, 4, 1, 2}.

Number	Tally	Frequency
0		6
1		3
2		4
3		2
4		4

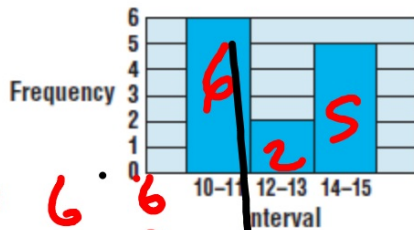
9
5
6

Use the frequency table at the left to answer each question.

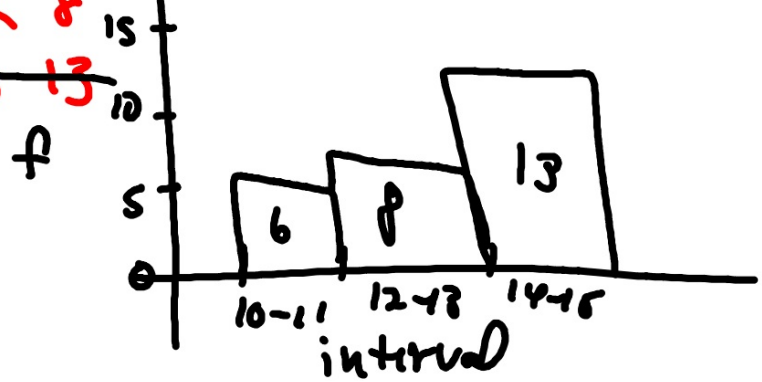
34. How many numbers are in the sample? 19
35. Which number occurs most frequently? 0
36. How many times does the number 2 occur? 4
37. Make a cumulative frequency table from the data.
38. How many times does a number less than 2 occur? 9
39. How many times does a number greater than or equal to 2 occur? 10

- Lesson 1-7 Construct and interpret line graphs, histograms, and stem-and-leaf plots.

Construct a histogram for the data {10, 10, 10, 10, 11, 11, 12, 13, 14, 14, 14, 15, 15}.



10-11 6 6
 12-13 2 8
 14-15 5 13



Use the histogram at the left to answer each question.

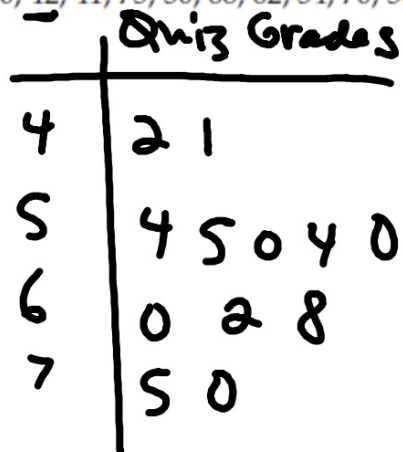
- How large is each interval? **2**
- Which interval has the most data? **10-11**
- How many numbers have a value greater than 11? **7**
- Make a cumulative histogram from the data.
- How many numbers are in the sample? **13**
- How many numbers have a value less than 14? **8**

Determine whether each is a good sample. Describe what caused the bias in each poor sample. Explain.

10. Thirty people standing in a movie line are asked to name their favorite actor.
11. Police stop every fifth car at a sobriety checkpoint.

Your Turn

- c. Make a stem-and-leaf plot of the quiz grades below.
54, 55, 60, 42, 41, 75, 50, 68, 62, 54, 70, 50



$$4 \mid 2 = 42$$

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