Name _____ Date _____ Block ___

ALGEBRA

14 - 1 Practice

Use the graph to answer each question. SHOW WORK!!

The graph at the right shows how the trade-in value of a car decreases yearly. The percents given in the graph are based on the price of the car when it was new.

1 What percent of a new car's value is lost after three years?

2 What is the approximate trade-in value of an $11,600 car after four years?

3 Pam Kane wants to trade in her car before it loses half its value. How long should she keep her car?

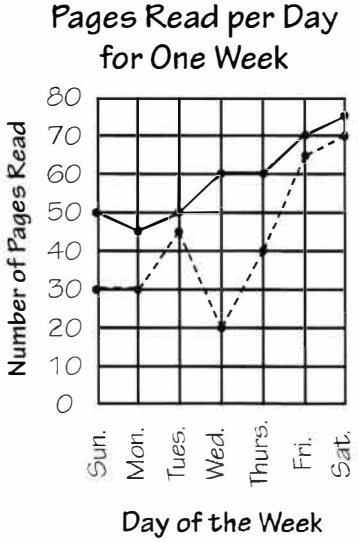
4 Two years ago, Leo Yednik paid $12,800 for a new car. What is the trade-in value of the car now?

5 Leo Yednik wants to buy a new station wagon with a selling price of $13,650. If the dealer allows him the trade-in allowance found in #4, what will be the net price of the new vehicle?

3 Practice • • • • • Working with Multiple-line Graphs

A **multiple-line graph** compares two or more sets of data, which are changing over time. This multiple-line graph illustrates the number of novel pages read each day for one week by two language arts students, Alyssa and Greg.

Directions: Use the information on page 13 and this graph to answer the following questions.



Key

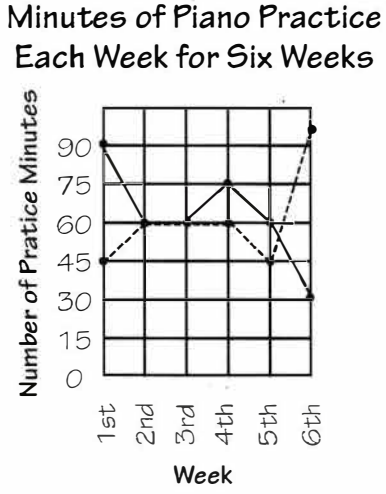
——— = Alyssa

------ = Greg

1. How many pages did Greg read on Sunday? _____
2. How many pages did Alyssa read on Sunday? _____
3. How many pages did Greg read on Friday? _____
4. How many pages did Alyssa read on Friday? _____
5. On which day did Greg read the fewest pages? _____
6. On which day did Alyssa read the fewest pages? _____
7. Which student read the most pages during the week?

   _____
8. How many more pages did Alyssa read than Greg on Monday? _____
9. On which three days did Alyssa read exactly five pages more than Greg? _____
10. How many total pages did Alyssa read? _____
11. How many total pages did Greg read? _____
12. Which student was more consistent in doing the assigned reading? _____

Directions: Study this graph illustrating how many minutes Sarah and Catherine practiced playing the piano in a period of six weeks. Answer the questions below.



Key

——— = Sarah

------ = Catherine

13. How many minutes did Sarah practice the first week?

    _____
14. How many minutes did Catherine practice the first week? _____
15. How many minutes did Sarah practice for the entire six weeks? _____
16. How many minutes did Catherine practice for the entire six weeks? _____
17. Which student practiced more in the sixth week?

    _____
18. Did Catherine become a better or worse piano student during the six weeks? _____ Explain.

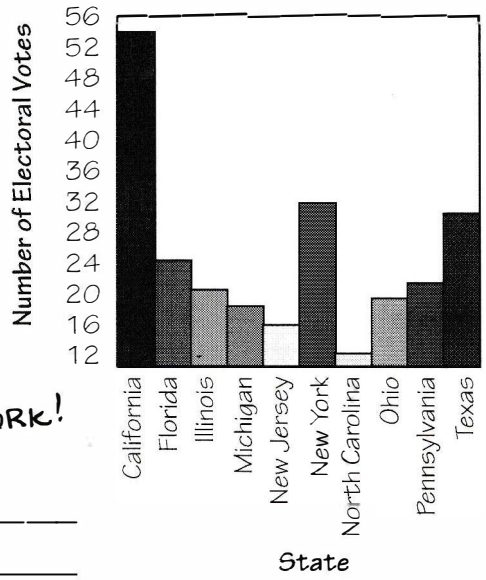
    _____

    _____

Name _____ Date _____ Block ____

Algebra 14-2 Practice

This single bar graph shows the number of electoral votes for each of the 10 most populated states. The states are labeled in blocks along the horizontal axis. The number of electoral votes is indicated on the vertical axis. There are 538 electoral votes distributed among the 50 states and the District of Columbia. They are elected by the people in each state to officially vote for the president of the United States. It takes 270 electoral votes to win an election.



Directions: Use the information on page 9 and the graph to answer these questions. SHOW WORK!

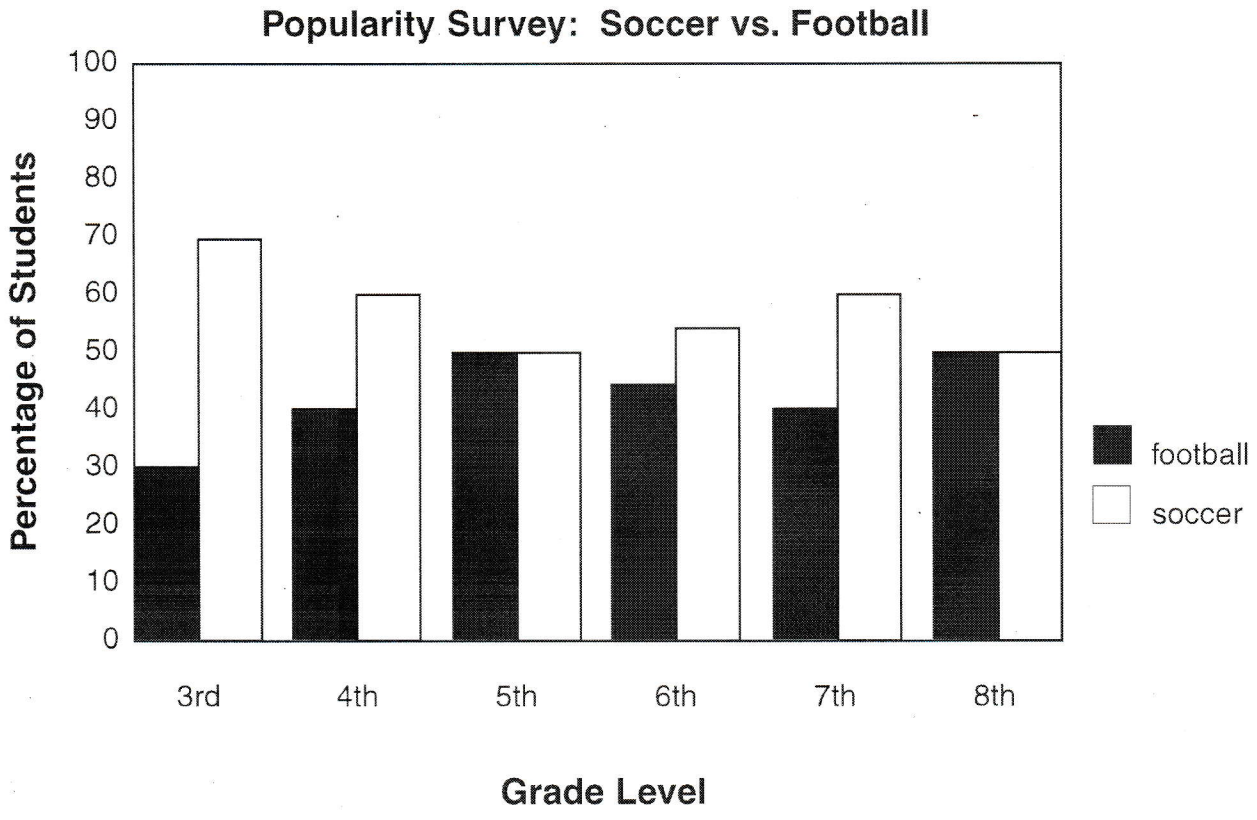
1. How many electoral votes does California have? _____
2. How many electoral votes does Texas have? _____
3. What is the interval between numbers on the scale? _____
4. How many electoral votes does New Jersey have? _____
5. What is the difference in the number of votes between Michigan and Illinois? _____
6. Which state has exactly one more electoral vote than Texas? _____
7. What is the total number of electoral votes of the 10 most populated states? _____
8. How many electoral votes are distributed among the remaining 40 states and the District of Columbia? _____
9. Why would a candidate spend more time campaigning in California than in North Carolina?

   _____
10. How many more votes than these 10 states would be needed to win a presidential election?

    _____
11. Which two pairs of states have the same number of electoral votes as California?

    _____
12. Why did the intervals start with 12 votes? _____
13. What could be misleading about this graph? _____

This double bar graph illustrates a survey of the relative popularity of soccer and football as participant sports for boys in the third through the eighth grade.



14. What percentage of third grade boys preferred to play football? _____

15. In which two grades do boys like to play soccer and football equally well? _____

16. What percentage of boys in the fourth grade prefer soccer? _____

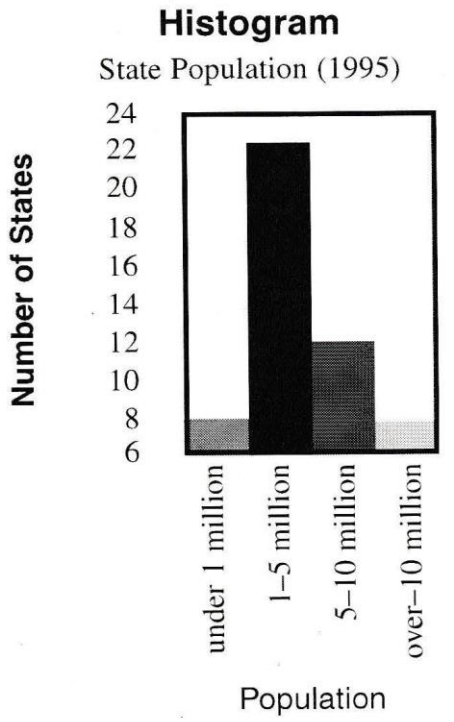
17. Is there any grade in which more boys prefer football? _____

18. What percentage of boys prefer football in the sixth grade? _____

19. What percentage of boys prefer football in the seventh grade? _____

Name _____ Date _____ Block ____

ALGEBRA **14-3 Practice**



Directions: Use the histogram to answer these questions.

1. How many states have a population under a million? _____
2. How many states have a population over 10 million? _____
3. How many states have a population of 5 to 10 million? _____
4. What range of population is most common for the states? _____
5. Name two reasons you think states have such different population figures. _____
6. Which two states do you think have the most population and the least population? _____
7. In which category does your state fall? _____

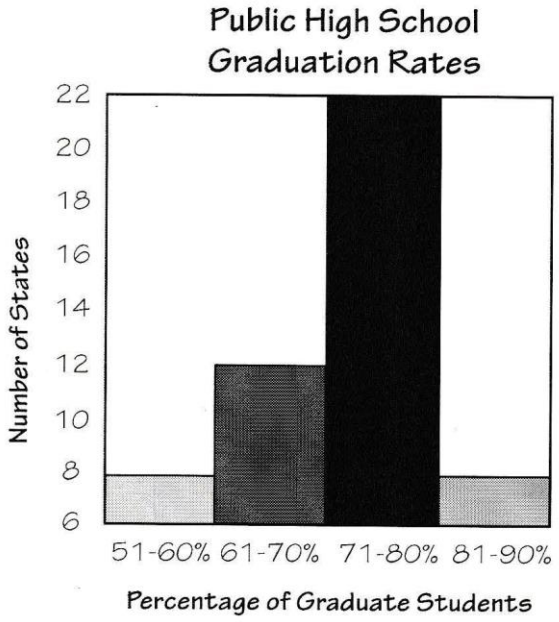
_____

Directions: This histogram illustrates the frequency of graduation rates in a recent year and the states where this frequency occurs.

8. How many states have between 81% and 90% of its students graduating? _____
9. How many states have between 51% and 60% of its students graduating? _____
10. What percentage of students is graduating in 22 states? _____
11. How many states are represented in all?

_____

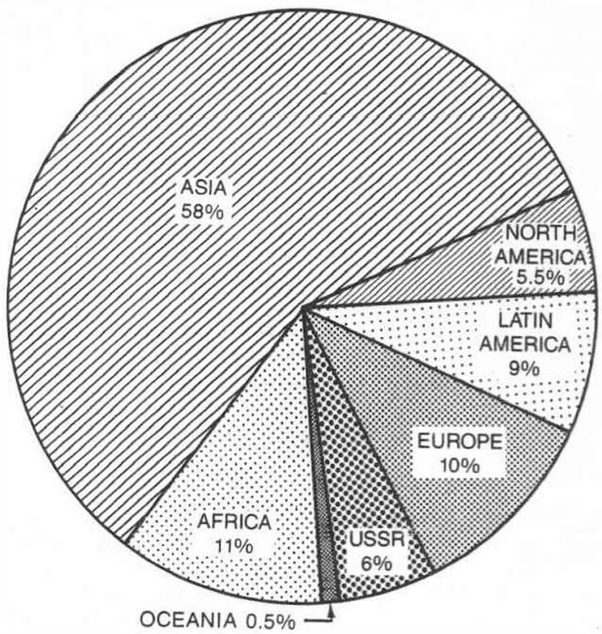
12. About 65% of California's public high school students graduate. In what frequency is California recorded on the graph? _____
13. Vermont is the state with the highest graduation rate (89.9%). In what frequency is Vermont included on the graph? _____
14. How might this histogram be used by public officials? _____



Name _____ Date _____ Block _____

Algebra

The world's population is estimated to be about 4,762,000,000. The circle graph below shows where the world's population lives, by region. Use the circle graph for Problem 1–8.



Find the approximate population of:

1. Africa _____
2. Asia _____
3. North America _____
4. Latin America _____
5. Europe _____
6. USSR _____
7. Oceania _____
8. How many more people live in Asia than live in Europe?

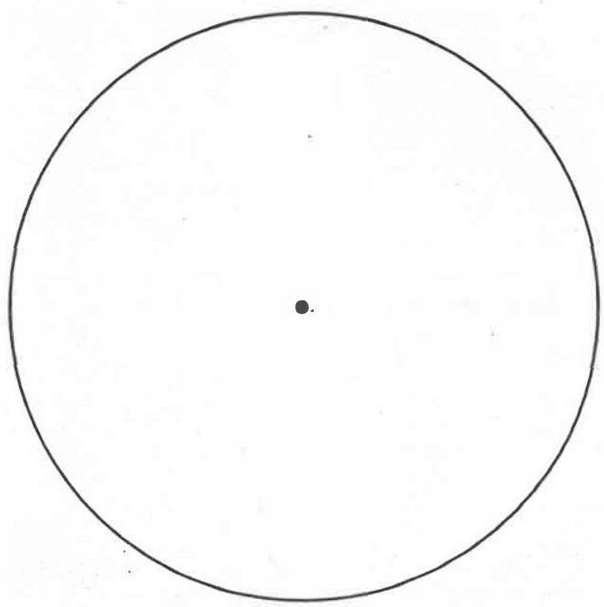
_____

14-4 Practice

9. Complete the table below and use the data to make a circle graph.

Henderson Family Budget

Category	Percent of Income
Food	20%
Housing	25%
Utilities	5%
Transportation	10%
Clothing	8%
Taxes	22%
Entertainment	7%
Other	3%



Algebra Name_____

Practice: 0-12a

Date_____ Block____

Find the mean, median, mode, and range for each data set. SHOW WORK!!

1) Test Scores

39	40	44	45	45	47	47
49	51	53	54			

2) Goals in a Hockey Game

4	5	5	5	5	5	5	6
7							

3) Games per World Series

4	5	5	5	6	7	7	7
7							

4) Age at First Job

15	15	15	15	16	16	17
18	18	20				

5) Mens Heights (Inches)

64	66	66	66	67	67	69
70	70	70	71	71	72	72
73	74					

6) Goals in a Hockey Game

2	2	2	3	4	5	5	5
5	7	7	7	9	9	9	11
11							

7) Annual Household Income

6,200	6,450	7,100	8,250
8,600	9,100	9,200	11,450
17,100	18,050	20,750	25,150
28,700	30,850	33,350	

8) # Words in Book Titles

1	1	1	2	2	2	2	2
2	2	3	3	4	4	5	5
5							

Name _____ Date _____ Block ____

ALGEBRA

0-12b Practice

Solve each of the following. SHOW WORK!!

1 Find the value of x if the mean of the following data is 91. 99, 86, 76, 95, x

2 Find the value of x if the mean of the following data is 4.8. 3.8, 4.2, 5.3, x

3 On his first five tests Mark received scores of 50, 62, 80, 75, & 70. What grade does Mark need on his sixth test to have an average of 60?

4 Luke mowed 8 lawns and earned $12, $10, $15, $15, $9, $10, & $15 for the first 7. How much did he make on lawn 8 if the mean was $12?

5 What is the value of x if 8, 4, & x have the same mean as 4 & 10?

6 On his four science tests, Rick scored 35, 54, 60, & 50. What does he need to score on his next test to pass the class? Will Rick be able to pass the class?