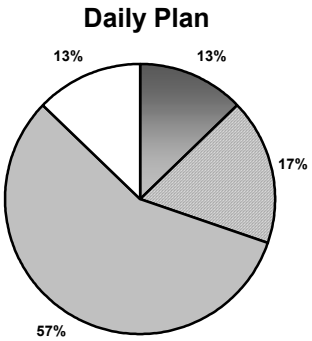
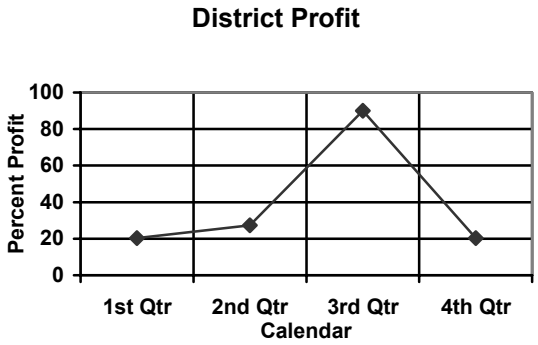
lesson twenty-eight - student resource sheet

Lesson Objective: Construct and solve word problems involving line graphs, bar graphs, double bar graphs, and circle graphs.

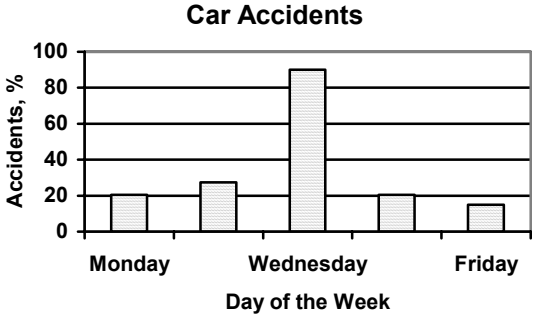
Vocabulary Box



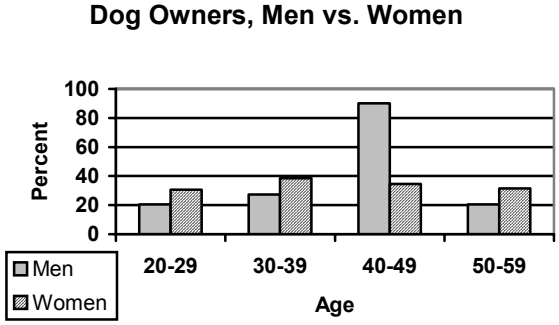
circle graph — A graph that shows parts of a whole.



line graph — A graph that shows how an amount changes over time.



bar graph — A graph that compares amounts.

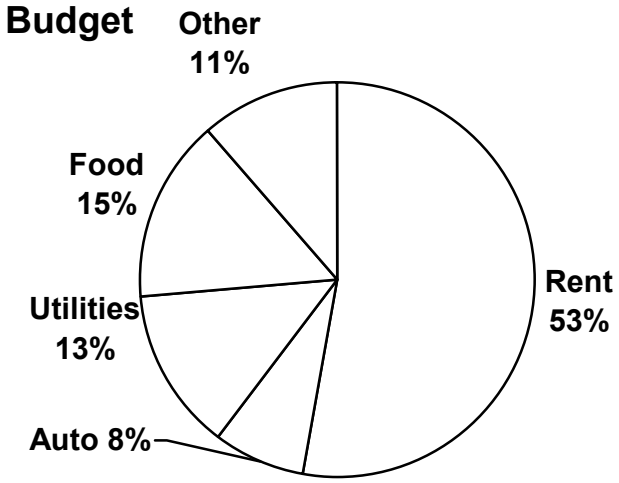


double bar graph — A graph that compares amounts of two sets of data.

Guided Practice

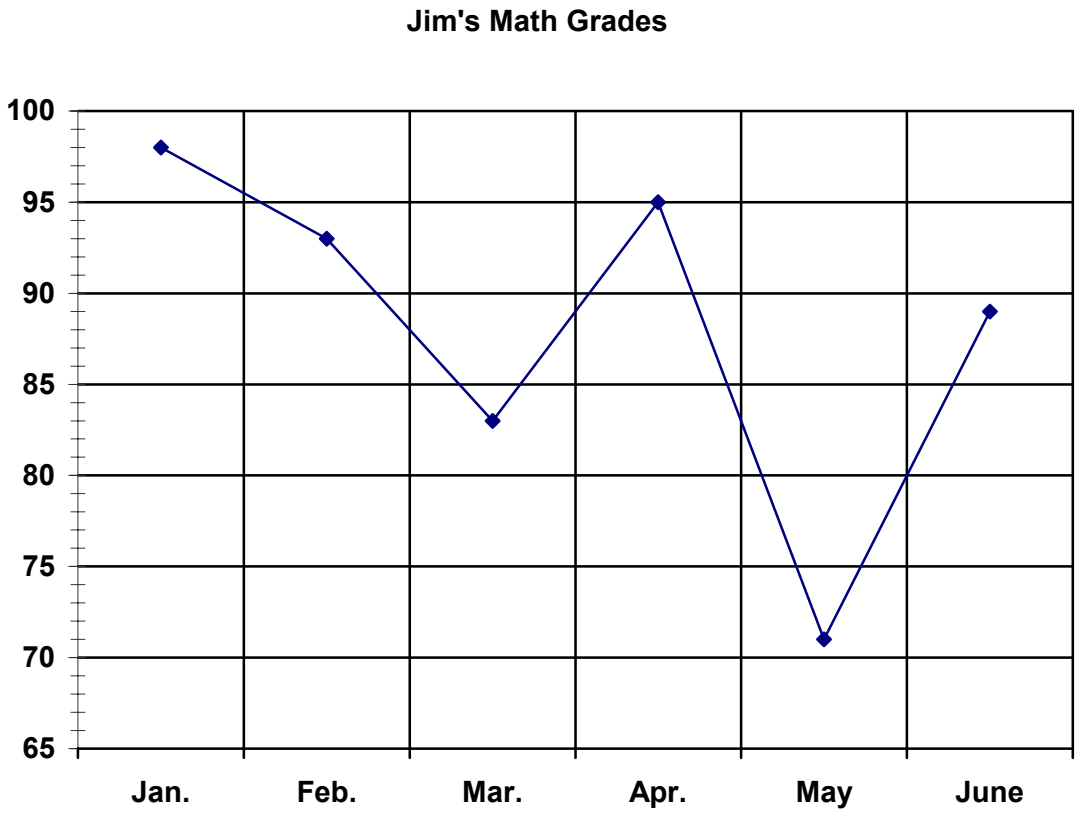
Directions: Complete the following practice problems. Your teacher will review the answers. Make sure you show all your work.

I. Work with a partner and use the circle graph below to answer the questions.



1. What percentage of the budget is spent on rent? _____
2. If the total budget is $1,325 per month, how much money is spent on rent? _____
3. Using the same total, how much money is spent on food? _____
4. Using the same total, how much is spent per month on auto expenses? _____

II. Use the line graph below to answer the following questions. Please work independently.



1. What was Jim's math grade in April? _____
2. What was Jim's math grade in June? _____
3. Between which two months did Jim experience the biggest grade decline? _____
4. How much did his grade drop between these two months? _____
5. Write your own question about the line graph. Include the answer.

Summary/Closure

A. Vocabulary Words

Write the type of graph that would be best to display the data in each situation described below.

1. Show the average daily temperature over a month. _____
2. Compare survey results of men to those of women. _____
3. Show the percentage of votes each candidate received in an election.

   _____
4. Show the number of people who frequently go to each of seven stores in a mall.

   _____

B. Summarize What We Learned Today

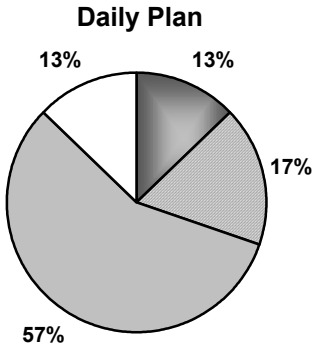
Put the steps for constructing a circle graph in order.

1. Label each section of the circle graph.
2. Collect data.
3. Determine how large each section of the circle graph should be and draw the sections.
4. Draw a circle.
5. Determine the percentage of the whole for each item.
6. Write a title.

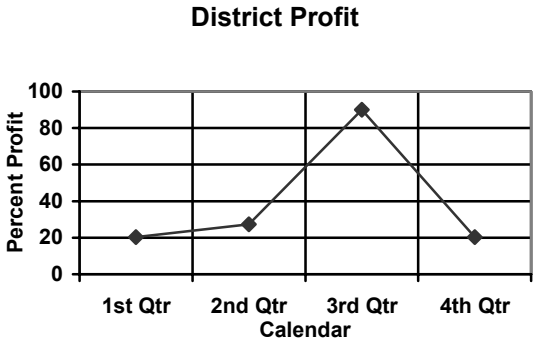
lesson twenty-nine - student resource sheet

Lesson Objective: Construct and solve word problems involving line graphs, bar graphs, double bar graphs, and circle graphs.

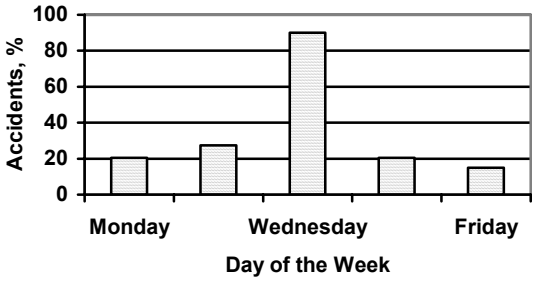
Vocabulary Box



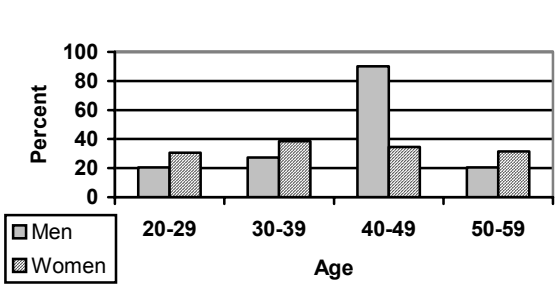
circle graph — A graph that shows parts of a whole.



line graph — A graph that shows how an amount changes over time.



bar graph — A graph that compares amounts.

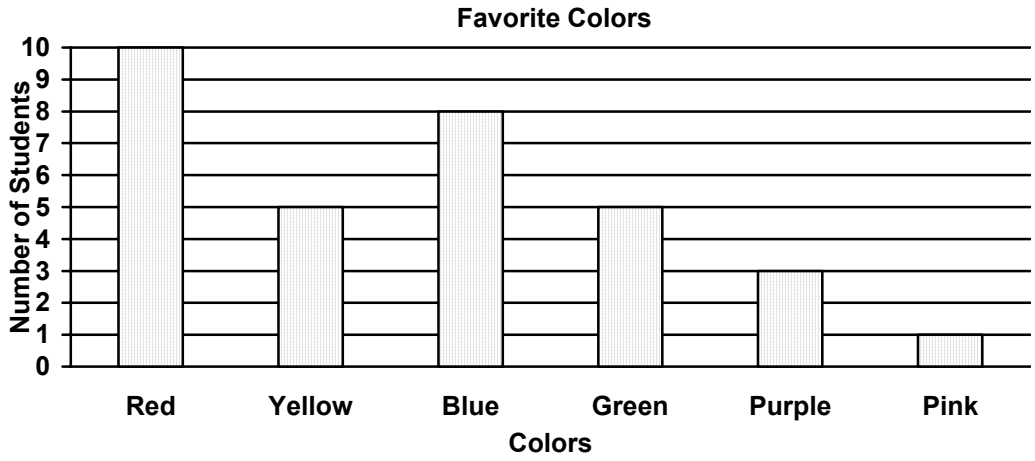


double bar graph — A graph that compares amounts of two sets of data.

Independent Practice

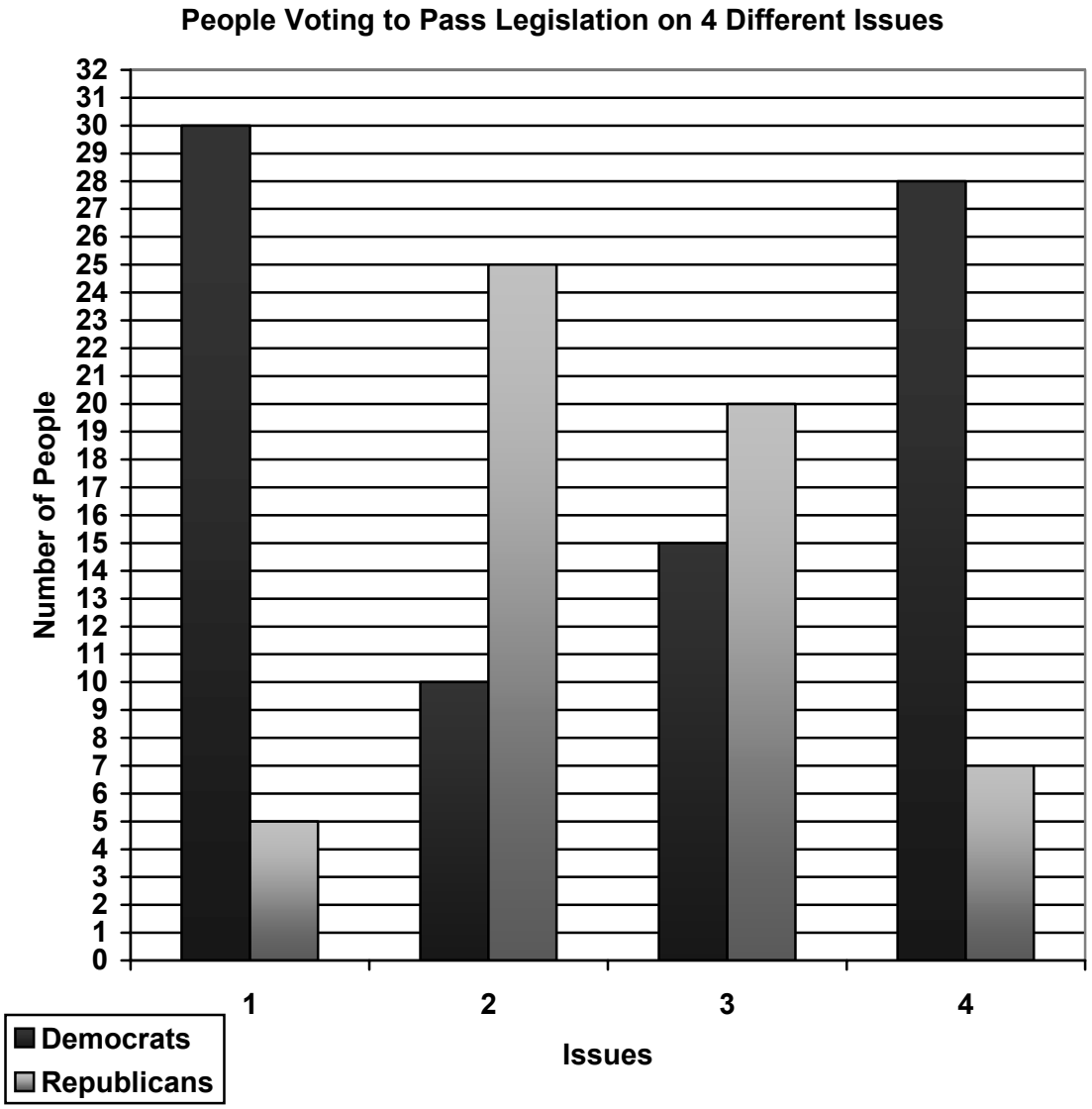
Directions: Use the graphs to complete the exercises on your own.

I. Use the bar graph to answer the questions.



1. How many students reported that pink was their favorite color? _____
2. How many students said that blue was their favorite color? _____
3. Which color did students like the best? _____
4. How many students were surveyed, assuming each could pick only one color? _____

II. Use the double bar graph below to answer the questions.



1. How many voters were polled altogether, assuming all those polled responded?_____

2. On which issue was there the greatest difference in the way Democrats and Republicans voted? _____

3. How large was the difference? _____

4. On which issue were the numbers of Democratic and Republican votes the closest? _____

5. How much of a difference was there? _____

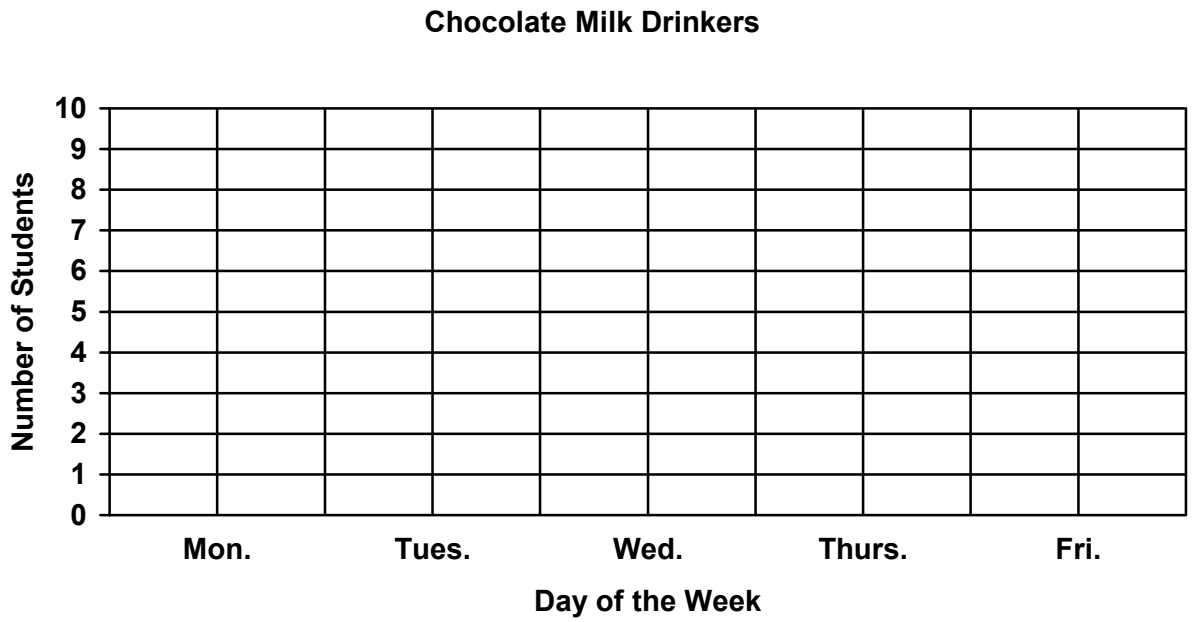
BONUS?

Directions: Complete the line graph below.

Ms. Stephens is keeping track of the number of students in her class who request chocolate milk in their lunches throughout the week. The results are shown below.

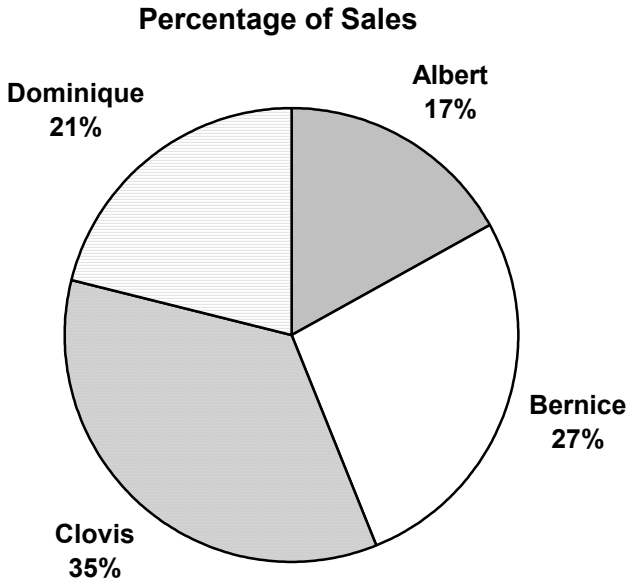
Monday	Tuesday	Wednesday	Thursday	Friday
5	8	3	9	4

Complete the line graph.

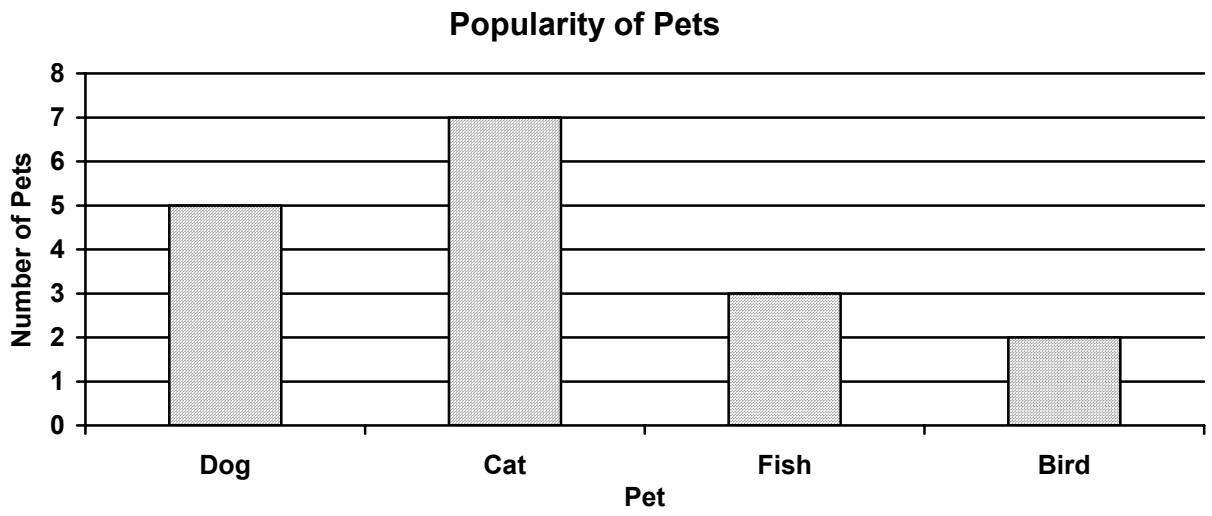


Problem Solving

You are working as the manager of a store, and you need to decide which employees deserve raises. The chart below shows the percentage of the total sales each employee is responsible for. Use the data to help make your decision.



1. What percentage of the sales is Albert responsible for? _____
2. If the total sales for the month were $13,782.00, how much money did Albert bring in? _____
3. How much money did Clovis bring in? _____
4. Who do you think deserves the biggest raise? _____
5. What other information would be helpful in making the decision? Why?



1. How many people like cats best? _____
2. Which pet is the least popular? _____
3. What is the difference between the most popular and the least popular pet? _____

lesson thirty - student resource sheet

Lesson Objective: Choose and use an appropriate problem-solving strategy.

Guided Practice on Problem Solving Strategies

Directions: Complete the following practice problems with your partners. Your teacher will review the answers. Make sure you show all your work, check your answers, and write your answers in complete sentences.

1. A builder is laying tile and decides to put a decorative design in the center of the floor. The pattern calls for him to increase the number of tiles in the next row by half the number of tiles in the current row. That is, each row will have half the number of tiles from the previous row added to it. For example, if he started with 6 tiles, the next row would have 9.

   If the third row has 27 tiles in it, how many tiles are in the first row?

   Which strategies did you use?

2. The parking at a local school has been increased by 25%. If there are now 150 spaces, how many spaces were there originally?

   Which strategies did you use?

3. When I multiply a certain integer by –4, the result is positive. When I add 10 to my number, the result is also positive, but when I add 6, the result is negative. My number is even. What is my number?

Which strategies did you use?

lesson thirty - student resource sheet

Problem Solving

Directions: Complete the following practice problems on your own. Your teacher will review the answers. Make sure you show all your work and check your answers

1. $-4+6--2=$_____

2. A number, when multiplied by –7, gives 63. What is the number?

3. If it takes 10 minutes to complete 12 math problems, how many math problems can you complete in 30 minutes? Write your answer in a complete sentence.

4. A car travels at an average speed of 55 miles per hour. How many miles will the car travel in 6 hours? Write your answer in a complete sentence.

5. A pair of shoes is on sale, $12.00 off. This is a savings of 20% off the regular price. What is the original price of the shoes? Write your answer in a complete sentence.

6. A man can dig a hole –2 feet (below ground) every hour. How far down can he dig in three hours? Write your answer in a complete sentence.