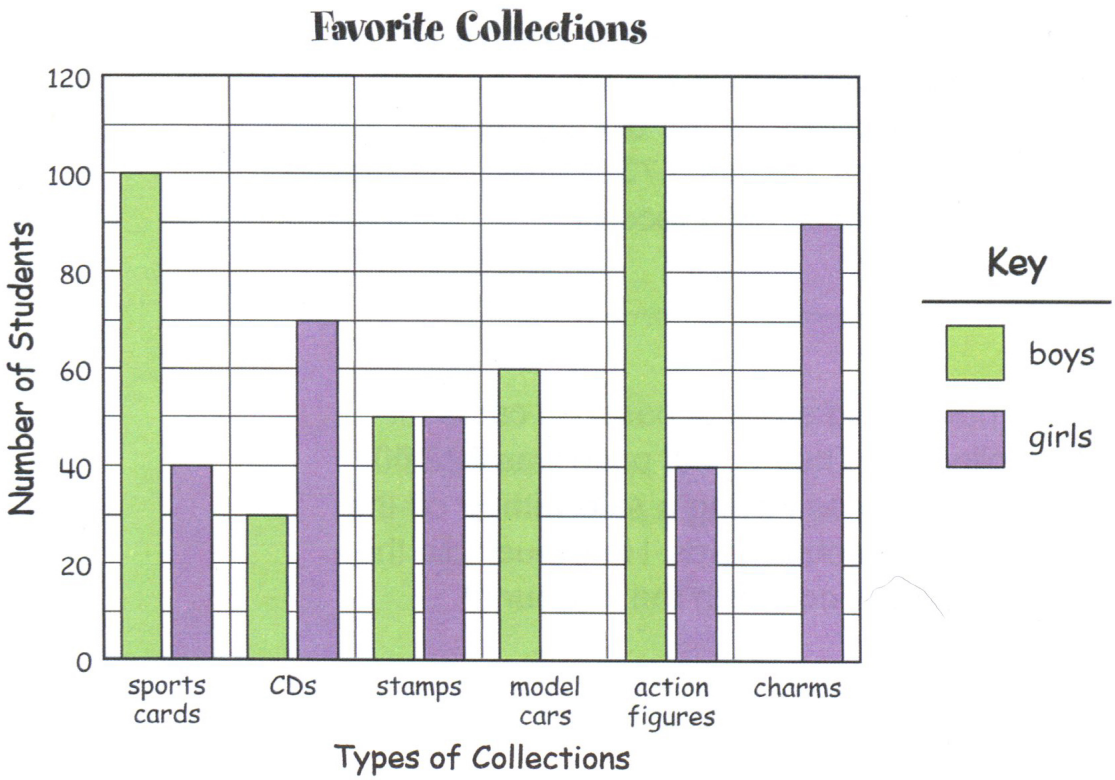
The following graph shows the favorite collections of students in the sixth grade at Lincoln School.



1. If each student could name only one type of collection, what is the total number of students shown on this graph?

_____

2. Are more boys or girls represented on the graph? How many more?

_____

3. Is it accurate to say that twice as many boys collect sports cards as collect model cars? Explain your answer.

_____

4. Is it accurate to say that half as many girls collect stamps as collect charms? Explain your answer.

_____

Baseball Cards

Skills:

Demonstrating Computation of Mixed Numbers

Determining Fractional Part of a Whole Number

Using Linear Measurement

Solve each problem.

1. Karl's dad collected baseball cards when his children were very young. Now that his children are older, he wants to give each of his three children the same number of cards to start their own collections. He has 3,732 cards. How many cards should each child receive?

_____

2. Sam purchased a box of baseball cards for his collection. The original price was $22.80, but the store was having a sale with $\frac{1}{4}$ off the price of all baseball cards. How much did the baseball cards cost with the discount?

_____

3. Amy has $\frac{2}{5}$ as many baseball cards as her brother, Max. If Max has 250 cards, how many cards does Amy have?

_____

4. Ramon has 432 baseball cards. He decided to lay the cards end to end down the hallway to see how far they would stretch. Each card is $3\frac{1}{2}$ inches long. How many feet long is the line of cards?

_____

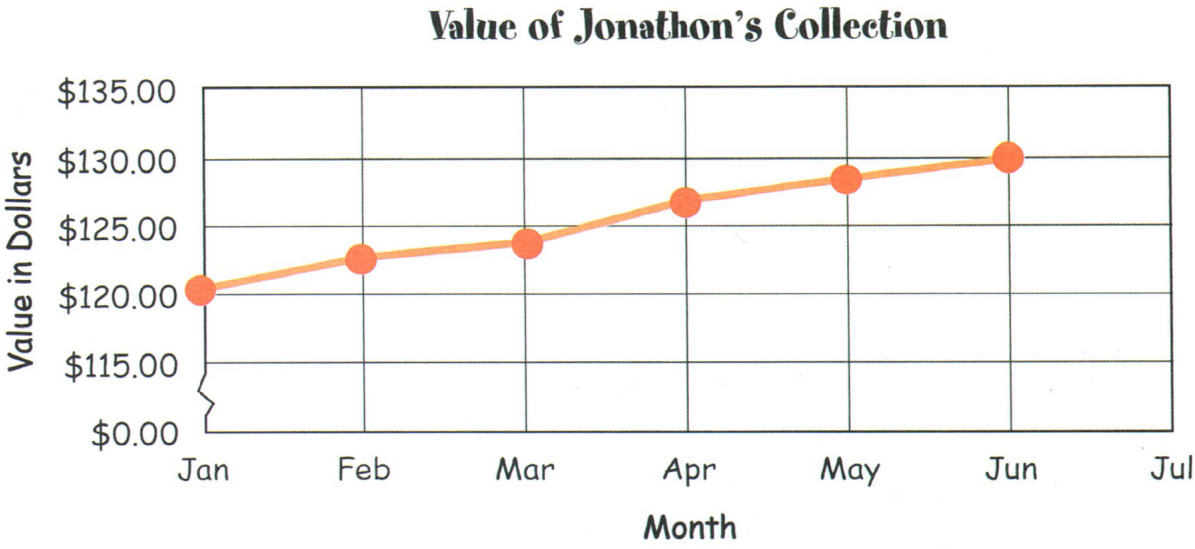
Collections

Jonathon's Collection

Skills:

Interpreting a Line Graph

The following line graph represents the value of Jonathon's baseball card collection.



Solve the problems.

1. How much has the value of Jonathon's collection increased from January to June?

_____

2. If this trend continues, what would be a reasonable estimate for the value of his collection in July?

_____

Collections

Gabriela's Collection

Skills:

Demonstrating Computation

Describing Geometric Shapes

Calculating Elapsed Time

Solve the problems.

1. Gabriela has been saving her allowance to buy three CDs. Each CD costs $14.98. What will be the total for the CDs?

_____

2. Gabriela is listening to her new CD. The time for each song is listed below.

Song 1 — 4 minutes 22 seconds
Song 2 — 5 minutes 11 seconds
Song 3 — 3 minutes 26 seconds
Song 4 — 9 minutes 58 seconds
Song 5 — 7 minutes 3 seconds

If she starts listening to the CD at 3:45 in the afternoon, at what time will the CD end?

_____

3. Gabriela and Burt are looking at the shape of a CD. Gabriela says that CDs are shaped like a cone. Burt says that CDs are shaped like a cylinder. Which geometric term describes the shape of a CD? Explain why.

_____

4. Gabriela prefers to buy CDs in sets of six. If she has 138 CDs from these sets, how many sets does she have?

_____

5. Gabriela wants to give $\frac{1}{4}$ of her CDs to her younger sister. She has 240 CDs. How many will she give her sister?

_____

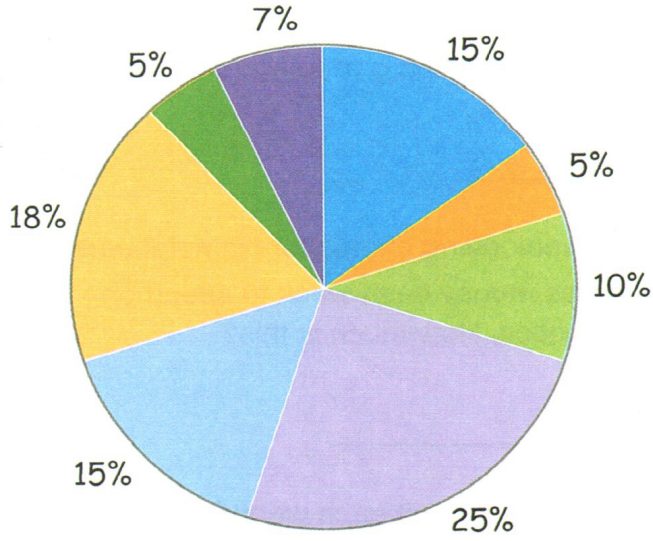
Collections

Song Lengths

Skills:

Interpreting a Circle Graph

The following graph represents the portion of the CD that each song uses.



Solve each problem.

1. If the entire CD is one hour long, how many minutes long is 10 percent of the CD?

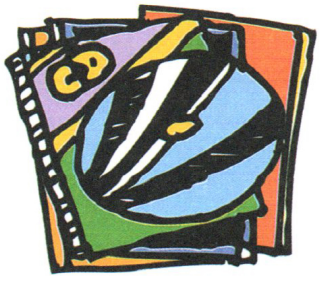
   _____

2. If the entire CD is one hour long, how many minutes long is 18 percent of the CD?

   _____

3. If the entire CD is one hour long, how much longer is the longest song than the shortest song?

   _____



Martin's Collection

Skills:

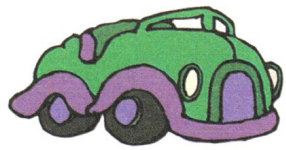
Demonstrating Computation

Determining Fractional Part of a Whole Number

Interpreting a Line Graph

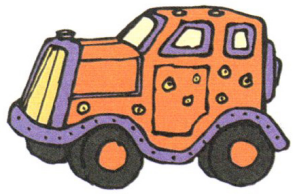
Martin collects model cars. Solve these problems about his collection.

1. Martin has three dozen model cars. One-third of his collection used to belong to his older brother, Ralph. How many model cars did Ralph give to Martin?



_____

2. Martin earns $15 a week doing chores for his neighbors. Martin saves $\frac{1}{4}$ of this money each week to spend on new cars for his collection. How much is this?

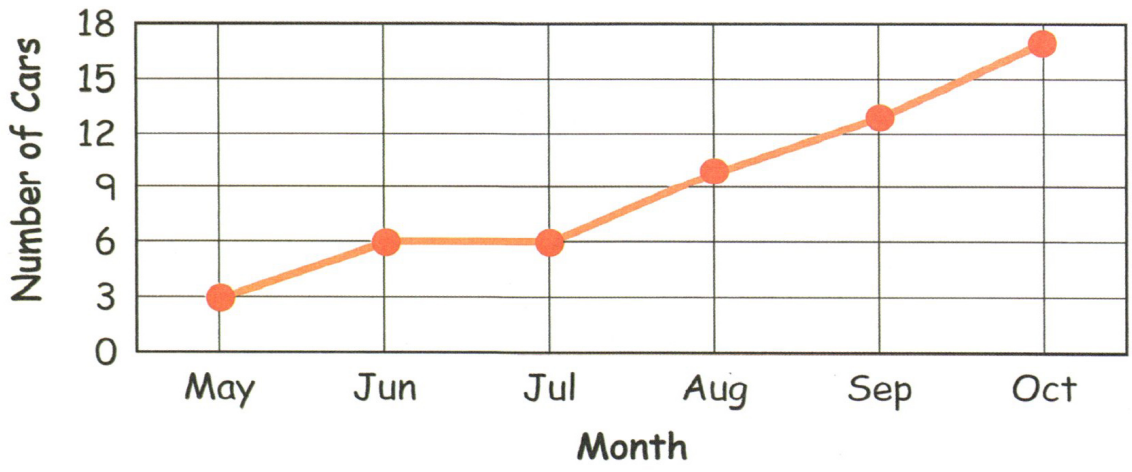


_____

3. If Martin saved the same amount each week for one year (52 weeks), how much money would he have?

_____

4. This line graph shows how many model cars Martin had at the end of six months. Read the graph, and then answer the questions.



In which month did Martin buy no cars? _____

If the average cost of a model car was $2.50, how much did Martin spend?

_____

Collections