



Describing Categorical Data

Explore

Directions: Use the data below to construct a relative frequency table. Then, use your relative frequency table to construct a percent bar graph. Answer the debriefing questions that follow.

Andie looked at her digital music player and counted the number of songs that she had for each genre of music. The table below shows Andie's results.

Digital Music Library

| Genre | Country | Rock | Hip Hop | Tejano |
|-----------------|---------|------|---------|--------|
| Number of Songs | 30 | 60 | 70 | 40 |

1. What is the total number of songs currently on Andie's digital music player?
2. What percent of the total number of songs is represented by each genre of music?
3. Use the data in the table to complete the relative frequency table below.

| Genre | Number of Songs | Ratio of Songs | Percent of Songs |
|---------|-----------------|----------------|------------------|
| Country | 30 | 0.15 | |
| Rock | 60 | | |
| Hip Hop | 70 | | |
| Tejano | 40 | | |
| Total | | | |



4. Mark off the percent bar below to show what percentage of Andie’s digital music comes from which genre of music.



5. Describe the distribution of the genres of music contained on Andie’s digital music player.

Debriefing Questions:

- How does the relative frequency table compare to the percent bar graph?
- How is the percent bar graph similar to a percent bar that you could use to represent a percent of a whole?
- Andie’s friend Trinh made a percent bar graph of the music on her digital music player. How does the distribution of music on Trinh’s digital music player compare to Andie’s?

Trinh’s Digital Music Library

| | | | |
|----------------|-------------|----------------|---------------|
| Country 25% | Rock 15% | Hip Hop 20% | Tejano 40% |
|----------------|-------------|----------------|---------------|

Andie’s Digital Music Library

| | | | |
|----------------|-------------|----------------|---------------|
| Country 15% | Rock 30% | Hip Hop 35% | Tejano 20% |
|----------------|-------------|----------------|---------------|

