Comparing and Scaling - Investigation 1 - Problem 1.2

The 6th grade students in Mr. Hogan's class were asked if they preferred LED lighted fidgets to the unlighted fidgets. Out of his 150 students, 100 preferred the LED fidgets and 50 preferred the unlighted fidgets.

Six students reported this data to me. Decide if each of these statements was reported accurately and explain your thinking:

- 1. Two thirds of the students prefer the LED fidgets.
- 2. The students prefer LED fidgets to unlighted fidget by a ratio of 2 to 1.
- 3. The ratio of students who prefer the unlighted fidgets is 1 to 2.

4. The number of students who prefer LED to unlighted is 50 more than the number of students who prefer the unlighted ones.

5. The number of students who prefer LED is two times the number who prefer unlighted.

6. 50% of the students prefer unlighted to LED.

Which statement would be the easiest for the average person to understand? Why do you think so?

Required Practice:

Students at a middle school are asked to record how they spend their time from midnight on Friday to midnight on Sunday. Carlos records his data in the table below. Use the table for Exercises 4–7.

Weekend Activitie	s	
Activity	Number of Hours	
Sleeping	18	
Eating	2.5	15
Recreation	8	
Talking on the Phone	2	NAK 1
Watching Television	6	
Doing Chores or Homework	2	
Other	9.5	

1. Write a statement comparing Carlos's time sleeping to his time watching television.

- 2. Decide if each statement is an accurate description of how Carlos spent his time that weekend.
- a. He spent one sixth of his time watching television.

b. The ratio of hours spent watching television to hours spent doing chores or homework is 3 to 1.

c. Recreation, talking on the phone, and watching television took about 33% of his time.

d. Time spent doing chores or homework was only 20% of the time spent watching television.

e. Sleeping, eating, and "other" activities took up 12 hours more than all other activities combined.

3. Make a table of your usual weekend activities and the number of hours you spend during the weekend (48 hours).

Activity	Number of Hours

Write 4 statements comparing your use of weekend time for various activities using ...

ratio:

difference:

fraction:

percent: