



### Bivariate Data (page 1)

<i>Type of Data</i>	<i>Also known as</i>	<i>Definition</i>	<i>Examples</i>	<i>We will show data in</i>
quantitative (think quantity)	numerical	values or observations that can be measured	age, weight, height, arm span, test scores	scatter plots
qualitative (think quality)	categorical	values or observations that can be sorted into groups or categories	eye color, subject, grade level, sport, country	two-way tables

Note: Data that contains numbers that cannot be measured is categorical. Examples: zip code, birthdates  
**Bivariate Data:** Two different response variables that are from the same population. If you have 2 *quantitative* variables, you will express them in ordered pairs  $(x, y)$  and organize them into a **scatter plot**. If you have 2 *qualitative* variables, you will organize the data into a **two-way table**.

Example: Which data would be considered quantitative?

- (a) favorite teacher (b) favorite subject (c) years in school (d) school's zip code

Example: Which data would be considered qualitative?

- (a) amount of time you study (b) % grade (c) how much you like your math class



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Example: Which data would be considered qualitative?

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### Bivariate Data (page 2)

Identify the following topics according to whether they will give you *qualitative* or *quantitative* data.

1. Number of viewers of a TV show	2. Age of students
3. Favorite sport	4. Depth of a river
5. Cost of an MP3 player	6. Which dinner to have at a banquet
7. Student preference for soda	8. Height of your classmates
9. Heart rate (beats per minute)	10. Average ticket prices for a game
11. Value of a car	12. Types of pets owned
13. Types of candy preferred	14. Calories for fast food
15. Countries visited by students	16. Points earned in a game

### Bivariate Data (page 2)

Identify the following topics according to whether they will give you *qualitative* or *quantitative* data.

17. Number of viewers of a TV show	18. Age of students
19. Favorite sport	20. Depth of a river
21. Cost of an MP3 player	22. Which dinner to have at a banquet
23. Student preference for soda	24. Height of your classmates
25. Heart rate (beats per minute)	26. Average ticket prices for a game
27. Value of a car	28. Types of pets owned
29. Types of candy preferred	30. Calories for fast food
31. Countries visited by students	32. Points earned in a game