

Introduction

1. Here is information about 10 randomly selected US residents from the 2000 census imported using Fathom software.

State	Number of Family Members	Age	Gender	Marital Status	Total Income	Travel time to work
Kentucky	2	61	Female	Married	21000	20
Florida	6	27	Female	Married	21300	20
Wisconsin	2	27	Male	Married	30000	5
California	4	33	Female	Married	26000	10
Michigan	3	49	Female	Married	15100	25
Virginia	3	26	Female	Married	25000	15
Pennsylvania	4	44	Male	Married	43000	10
Virginia	4	22	Male	Never married/ single	3000	0
California	1	30	Male	Never married/ single	40000	15
New York	4	34	Female	Separated	30000	40

Problem:

- Who are the individuals in this data set?
- What variables are measured? Identify each as categorical or quantitative. In what units were the quantitative variables measured?
- Describe the individual in the first row.

2. Many people like to ride roller coasters. Amusement parks try to increase attendance by building exciting new coasters. The table below displays data on several roller coasters that were opened in 2009.

Roller Coaster	Type	Height (ft)	Design	Speed (mph)	Duration (s)
Wild Mouse	Steel	49.3	Sit Down	28	70
Terminator	Wood	95	Sit down	50.1	180
Manta	Steel	140	Flying	56	155
Prowler	Wood	102.3	Sit down	51.2	150
Diamondback	Steel	230	Sit down	80	180

- What individuals does this data set describe?
- Clearly identify each of the variables. Which are quantitative? In what units are they measured?
- Describe the individual in the highlighted row.

3. Popular magazines rank colleges and universities on their “academic quality” in serving undergraduate students. Describe two categorical variables and two quantitative variables that you might record for each student. Give the units of measurement for the quantitative variables.