



UNIVERSITY OF
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Categorical Data: Tables, Bar Charts, and Pie Charts

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Categorical Data

Classifies individuals or items into different groups

ID	Marital Status
62229	1
62230	3
62231	1
62232	1
62233	4
62234	5
...	...

*Marital Status is coded such that...

1: Married, 2: Widowed, 3: Divorced, 4: Separated, 5: Never Married, 6: Living w/ Partner, 7: Refused, 8: Don't Know

The table here shows just an example of

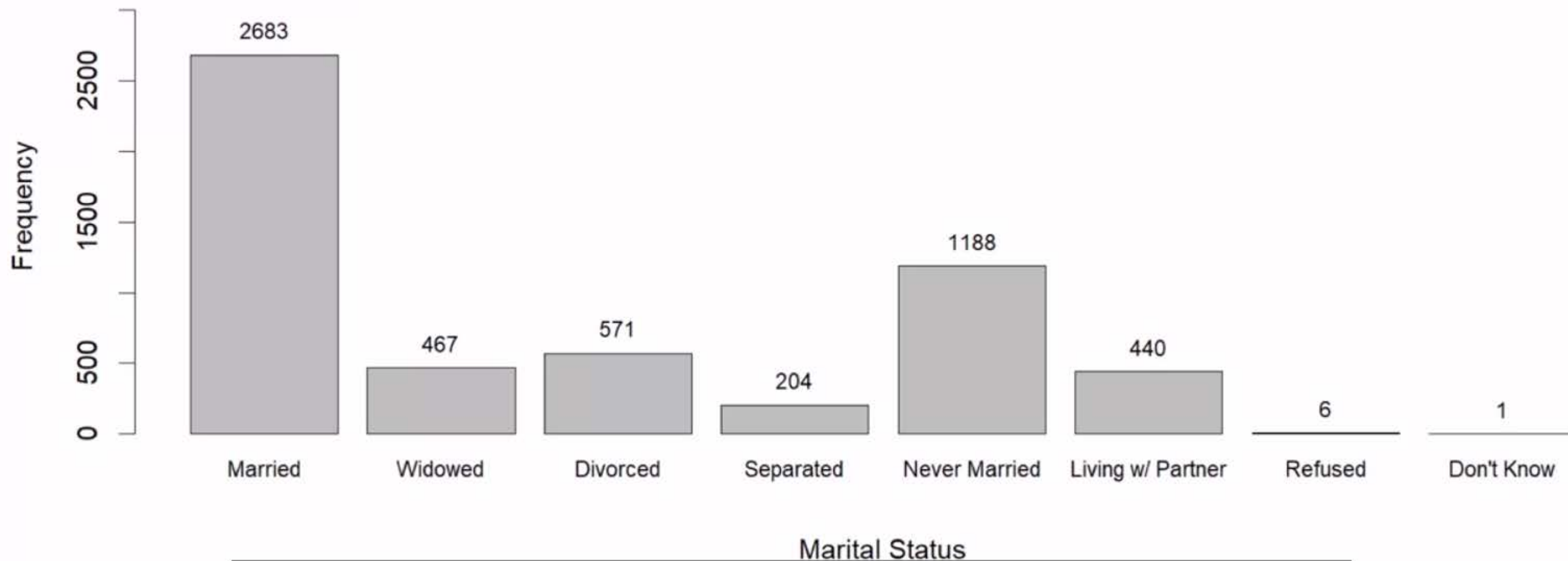
Frequency Table

- **Counts**
- **Percentages**

Marital Status	Count	Percent
Married	2683	48.3%
Widowed	467	8.4%
Divorced	571	10.3%
Separated	204	3.7%
Never Married	1188	21.4%
Living w/ Partner	440	7.9%
Refused	6	0.1%
Don't Know	1	0.0%
Total	5560	100%

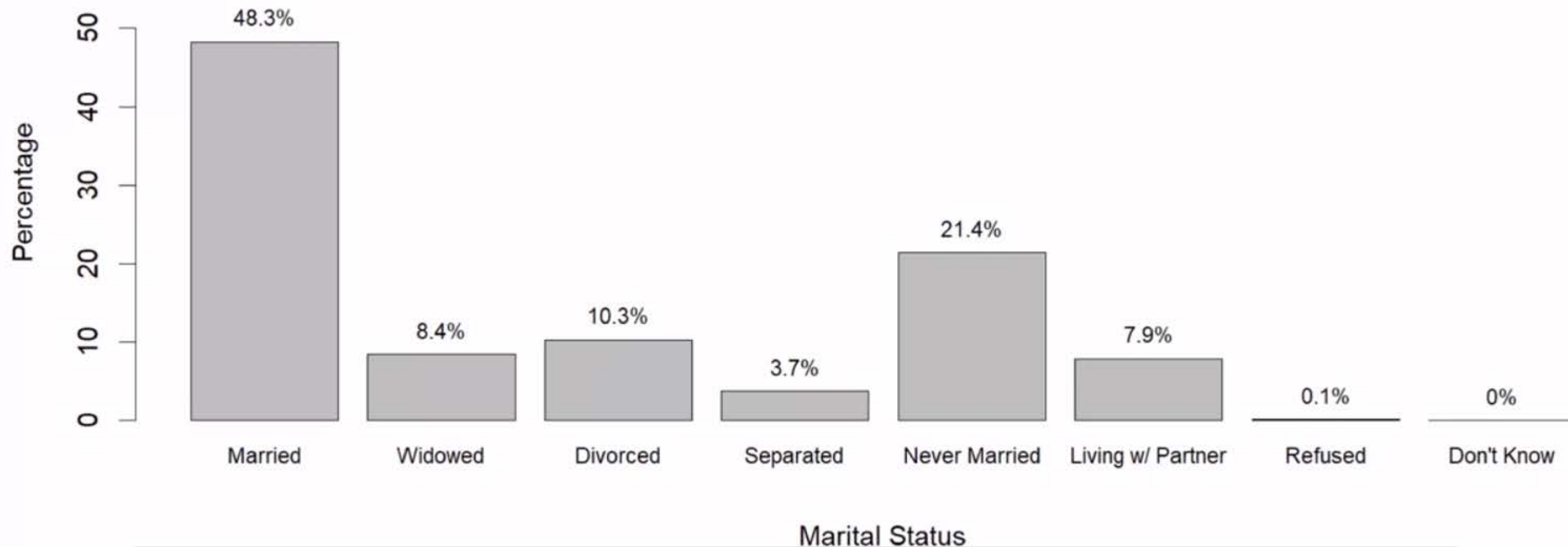
This is the most common way to summarize categorical data.

Bar Chart of Marital Status



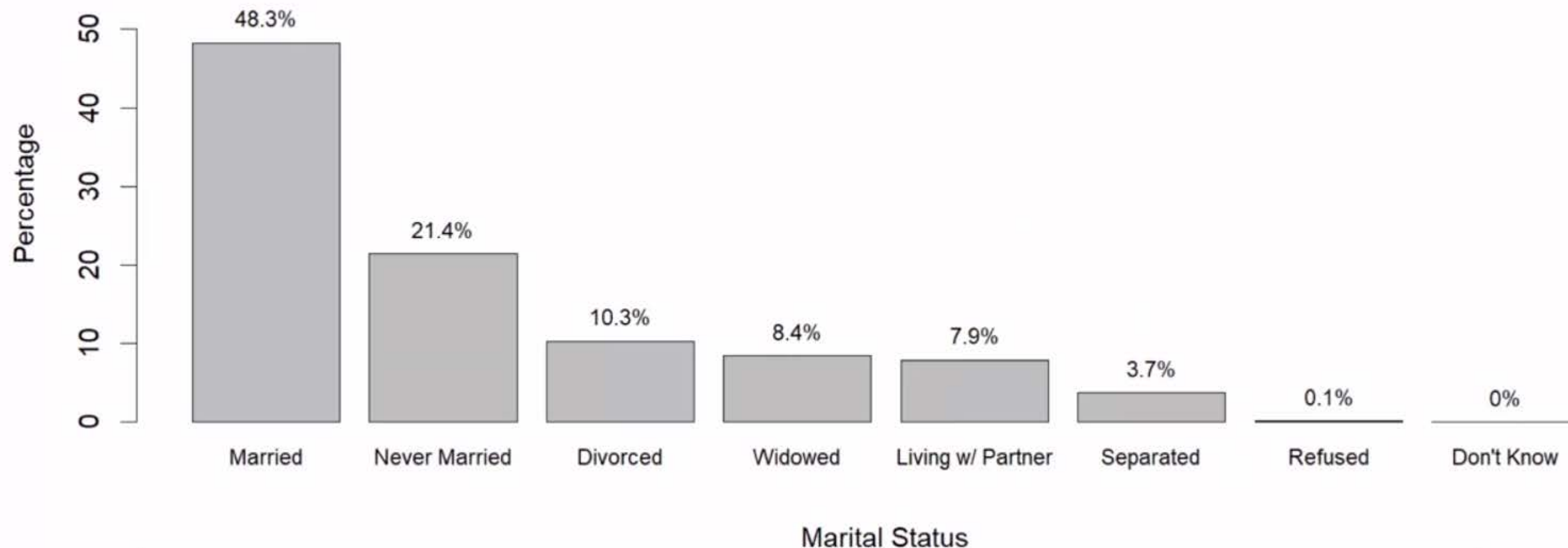
We can also take this bar chart and instead of counts,

Bar Chart of Marital Status



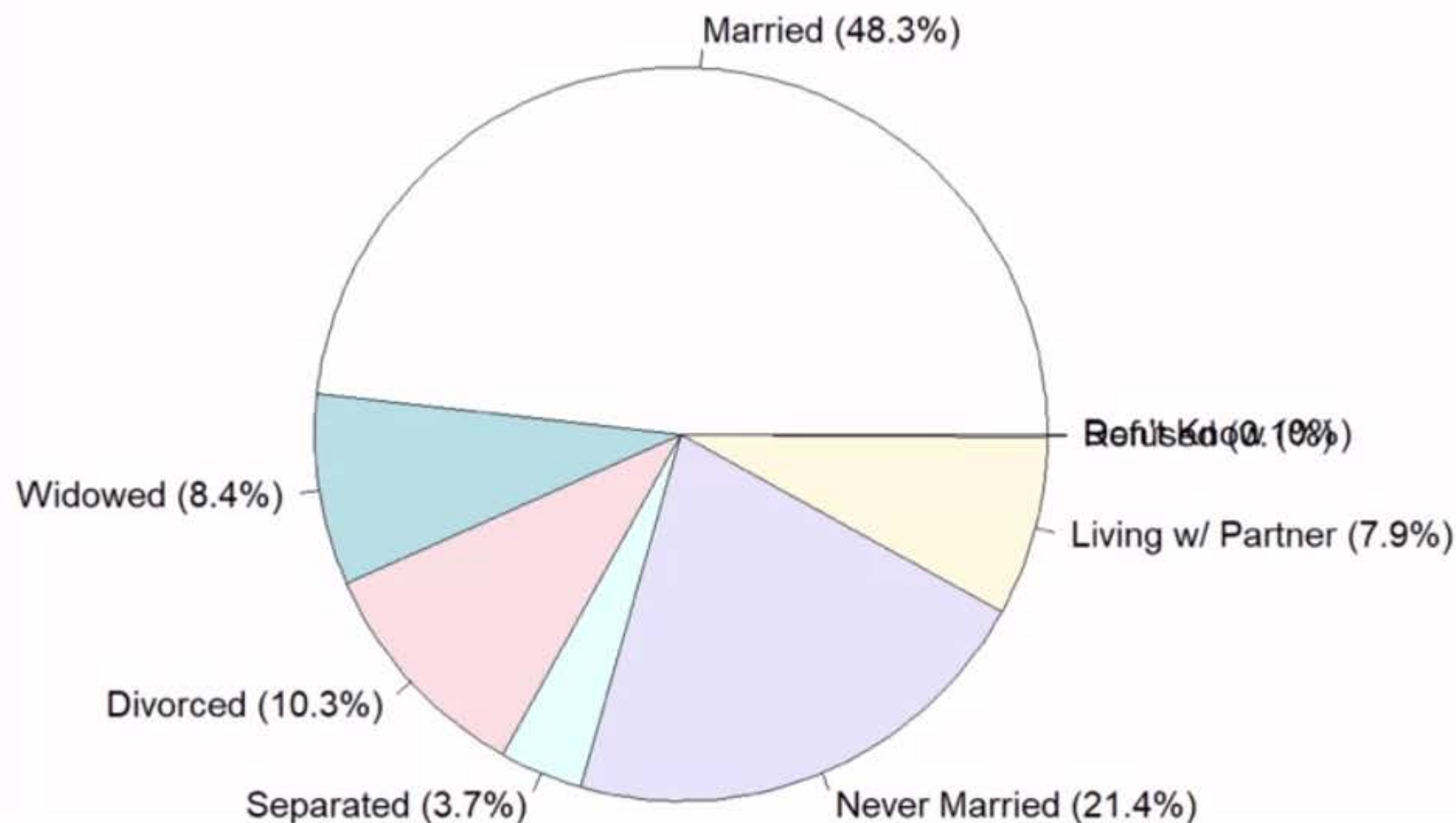
use those percentages that we also had in the frequency table.

Bar Chart of Marital Status



sometimes we want to rearrange the bars in descending order.

Pie Chart of Marital Status



Another option for graphs with categorical data is a pie chart.

Categorical Data

- **Frequency Tables**
 - Great for numerical summaries
- **Bar Charts**
 - Great for visualization
- **Pie Charts**
 - Use with caution