Consider the **KidsFeet** dataset in R. (Ensure you have library(mosaic) loaded.)

To see the dataset you would run the code:

> View(KidsFeet)

To open the help file about the dataset you would run the code:

> ?KidsFeet

Go ahead and run both of the above codes in R. Be sure to read through the help file and glanced through the dataset before answering the following questions.

Classify each column of the **KidsFeet** dataset as either quantitative or qualitative.

name	birthmonth	birthyear	length	width	sex	biggerfoot	domh
qualitative	could go either way	quantitative	quantitative	quantitative	qualitative	qualitative	qua

The table( ) function is very useful for qualitative variables as explained in your Math 325 Statistics Notebook >> R Commands page. Use it to answer the following question.

How many boys and girls are there in this dataset?

Boys: 20

Girls: 19

Which foot is more commonly the bigger foot (happens the most in this dataset)?

L (Type the answer using the same value used by the dataset for the bigger foot.)

Which birth month is most common among these sampled children?

3 (Type either the name of the month or the month number.)

Note that the table( ) function can also be used with two variables at once. This can help answer questions like, "are girls or boys more likely to be left handed?" The answer turns out to be "not really." Show that you can find this answer yourself in R.

	Boys	Girls
Left Handed	5	3
Right Handed	15	16

The group_by( ) and summarise( ) functions are very useful for computing "our favorite statistics" of quantitative variables. This is demonstrated in your Math 325 Notebook >> Describing Data >> Numerical Summaries >> Five-number Summary as well as in your R Commands page at the bottom under "group_by and summarise".

Be sure library(tidyverse) is loaded, then use group_by( ) and summarise( ) to obtain the values needed to fill in the following table.

Summaries of children's foot lengths according to their gender.

sex	min	Q1	median	Q3	max	mean	sd	n	missing
Boy	22.9	24.35	24.95	25.8	27.5	25.10500	1.216758	20	0
Girl	21.6	23.65	24.20	25.1	26.7	24.32105	1.330238	19	0

For this particular sample of data, which gender has the longest feet on average?

Boys

Which gender shows the most consistency in length of feet among children in this sample?

Boys