

# TWO-WAY FREQUENCY TABLES

LA GOLDHAHN

# STANDARDS:


Common Core State Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Attend to precision.

MCC9-12.S.ID.5 Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.

Are your  
speakers on??

## **BY THE END OF THIS LESSON, YOU SHOULD BE ABLE TO:**

- 1. Interpret data from a two-way frequency table**
  - 2. Identify and interpret joint, marginal, and conditional relative frequencies**
  - 3. Create a conditional distribution table**
  - 4. Create a relative frequency chart**
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# TWO-WAY FREQUENCY TABLE

**Watch this:** <http://www.youtube.com/watch?v=aUwpxoaCV-w>

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# MARGINAL AND JOINT DISTRIBUTIONS

**Read this:** <http://stattrek.com/statistics/two-way-table.aspx>



# Quiz

Quiz 1

Question 1 of 8 ◻ ◀ ▶ Point Value: 10 / Total Points: 0 out of 80

A public opinion survey explored the relationship between age and support for increasing the minimum wage. The results are found in the following two-way frequency table.

	For	Against	No Opinion	TOTAL
Age 21-30	15	20	5	40
Age 31-40	20	30	15	65
Over 40	10	20	5	35
TOTAL	45	70	25	140

Use this data to answer the following questions.

Are you ready??

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no

yes

Answer Submit All

Click the  **Quiz** button to edit this quiz

# CONDITIONAL DISTRIBUTIONS

**Watch:** <http://www.youtube.com/watch?v=-vLW7Ss7M94>



# CONDITIONAL DISTRIBUTION TABLE

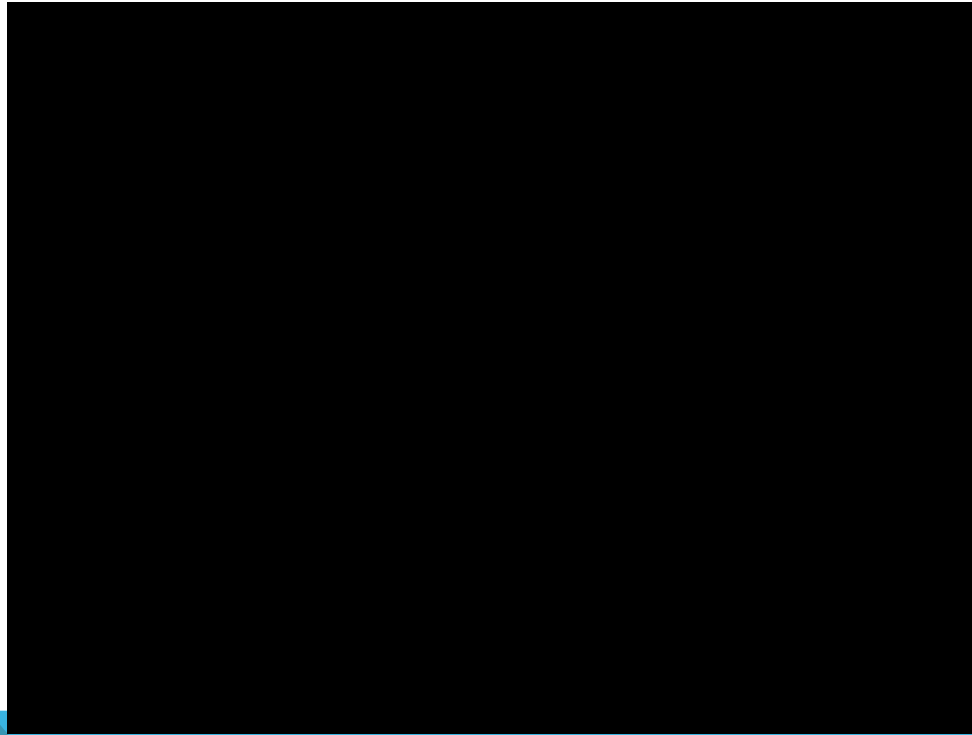
A group of students were asked to choose their favorite mascot. Make a conditional distribution table of the results.

	Bulldogs	Yellow Jackets	Tigers
Male	20	21	14
Female	25	17	23

Go to next slide...



# CONDITIONAL DISTRIBUTION TABLE



# AS A PERCENTAGE...

	Bulldogs	Yellow Jackets	Tigers	Total
Male	16.7%	17.5%	11.7%	45.8%
Female	20.8%	14.2%	19.2%	54.2%
Total	37.5%	31.2%	30.8%	

# RELATIVE FREQUENCY

**Go here:** <http://www.mathsisfun.com/data/relative-frequency.html>

**Make sure you try the 10 practice problems.**



# REVIEW:

Key concepts covered in this presentation:

1. How to read a two-way frequency table
2. Marginal and joint distributions
3. Conditional distribution tables
4. Relative frequency