

Honors Statistics Summer Packet



Welcome to Honors Statistics! The study of statistics is unlike any math class that you have taken before. Honors Stats acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There is heavy emphasis on the ability to think, reason, explain and support your conclusions as opposed to just performing computations. Writing and reading comprehension are important components to the course as a large part of this class is clear communication and interpretation of data.

To help prepare you for our course, you will need to create a deltamath student account and then follow the directions given on the next page. Try your best to complete all questions. There will be an assessment on this material during the first week of class. Good Luck!

If you have any questions as you work you can email me using sara.starnes@knoxvillecatholic.com, I will probably be checking my email once a week.



Name: _____

Creating your account

1. Go to <https://www.deltamath.com/students/> and click the yellow button that says "Register"
2. It will ask you for a class code, type in P9V7-25ZP (with the dash exactly as shown)
3. Use your school email and your first and last name so I can give the appropriate person credit
4. Once you have successfully registered you will be directed to a page with all your assignments, use the chart below to work through the material. Since you can keep doing as many problems as you like beyond the required there is no reason you should not receive a 100 for this graded assignment!

***I have included some videos to help with certain assignments in case it's been a while since you've seen this material or in case it's your first interaction.

	Video	DeltaMath Assignment Name
Find Mean Graphically		1. Finding the Mean Graphically (Guided)
Frequency Tables	https://www.youtube.com/watch?v=Njub_Wxuh8E https://www.youtube.com/watch?v=UNCzpuQBuw0	1. Create a Frequency Table 2. Finding the Mean from a Frequency Table
Dot Plots		1. Interpret Dot Plot
Histogram	https://www.youtube.com/watch?v=pYPwAIXWX-o	1. Interpret Histograms/Bar Charts 2. Create Histograms
Boxplot	https://www.youtube.com/watch?v=nV8jR8M8C74	1. Interpret Box Plots 2. Create Box Plots
Interpretations		1. Center and Spread Visually 2. Interpret Mixed Representations
Calculator Output	https://www.youtube.com/watch?v=kXEWc5WN3vQ	1. Interpreting Calculator Output (Stats)

I will be able to see your progress on delta math so you do not need to turn in anything for this portion of the summer work.

However, please turn in the next two questions on the first day of class! If you have access to a printer just print the next two pages and show your work on the printout. If you do not have access to a printer then write your work on graph paper and make sure your name is on it, you do not need to rewrite the questions.

Name: _____

Date: _____

TURN IN on the first day of class.

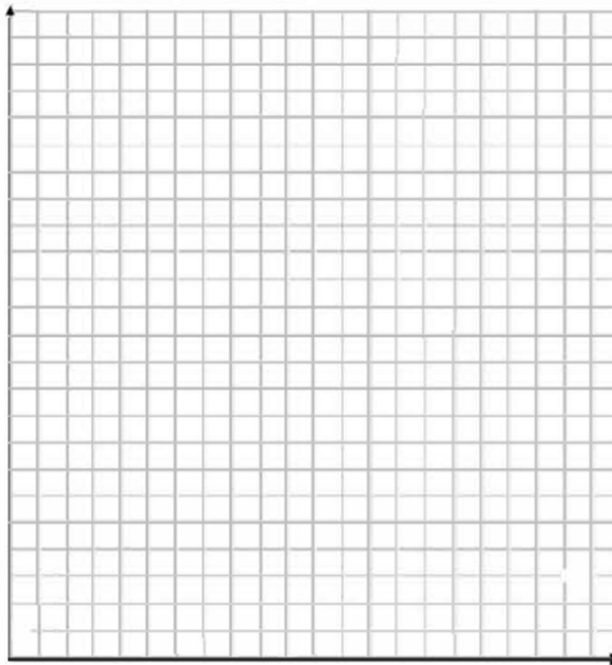
1. This table gives the percentage of residents aged 65 or older in each of the 50 states.

State	Percent	State	Percent	State	Percent
Alabama	13.1	Louisiana	11.5	Ohio	13.4
Alaska	5.5	Maine	14.1	Oklahoma	13.4
Arizona	13.2	Maryland	11.5	Oregon	13.2
Arkansas	14.3	Massachusetts	14.0	Pennsylvania	15.9
California	11.1	Michigan	12.5	Rhode Island	15.6
Colorado	10.1	Minnesota	12.3	South Carolina	12.2
Connecticut	14.3	Mississippi	12.2	South Dakota	14.3
Delaware	13.0	Missouri	13.7	Tennessee	12.5
Florida	18.3	Montana	13.3	Texas	10.1
Georgia	9.9	Nebraska	13.8	Utah	8.8
Hawaii	13.3	Nevada	11.5	Vermont	12.3
Idaho	11.3	New Hampshire	12.0	Virginia	11.3
Illinois	12.4	New Jersey	13.6	Washington	11.5
Indiana	12.5	New Mexico	11.4	West Virginia	15.2
Iowa	15.1	New York	13.3	Wisconsin	13.2
Kansas	13.5	North Carolina	12.5	Wyoming	11.5
Kentucky	12.5	North Dakota	14.4		

Histograms are a way to display groups of quantitative data into bins (the bars). These bins have the same width and scale and are touching because the number line is continuous. To make a histogram you must first decide on an appropriate bin width and count how many observations are in each bin. The bins for percentage of resident's aged 65 or older have been started below for you.

Finish the chart of bin widths and then create a histogram using those bins on the grid below. Make sure you use an appropriate scale.

Bin Widths	Frequency
4 to < 6	1
6 to < 8	
8 to < 10	



2. A statistic is a number calculated from data. Quantitative data has many statistics that can be calculated. Find the given statistic from the data of homeruns by Mark McGuire hit in each season from 1982-2001.

70 52 22 49 3 32 58 39
39 65 42 29 9 32 9 33

Mean	Q1
Minimum	Q3
Maximum	Range
Median	IQR

b. Make a boxplot of the data. Use the minimum, Q1, median, Q3, and maximum. Make sure to label the axis appropriately.

