

Construct a Box Plot from the following data:

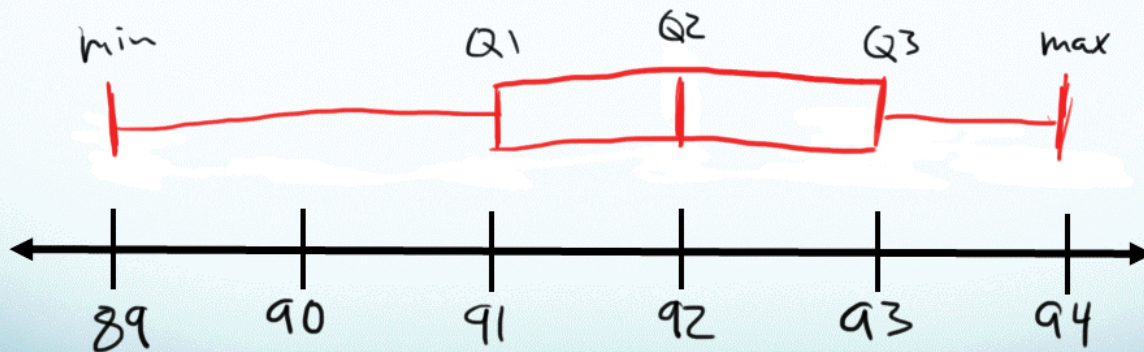
Day	Temperature
1	89
2	89
3	91
4	92
5	92
6	92
7	93
8	93
9	94
10	92

Warm UP (5 min)

Construct a Box Plot from the following data:

89, 89, 91, 92, 92, 92, 93, 93, 94
min Q1 Q2 Q3 max

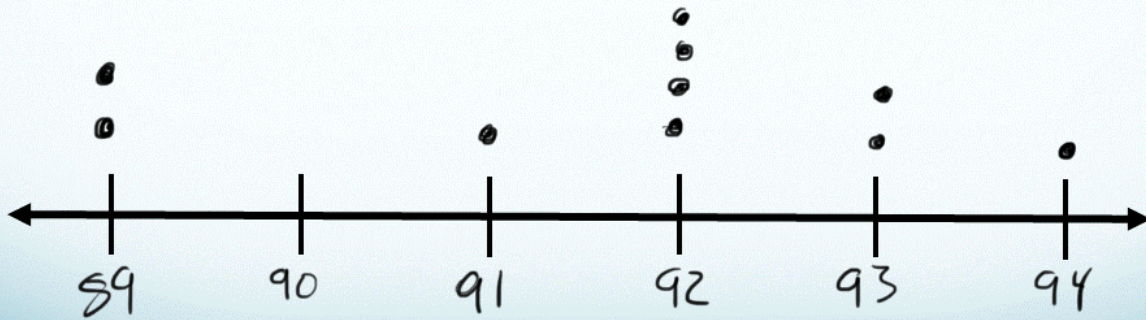
Day	Temperature
1	89
2	89
3	91
4	92
5	92
6	92
7	93
8	93
9	94
10	92



Warm UP (5 min)

Construct a **DOT PLOT** from the following data:

Day	Temperature
1	89
2	89
3	91
4	92
5	92
6	92
7	93
8	93
9	94
10	92



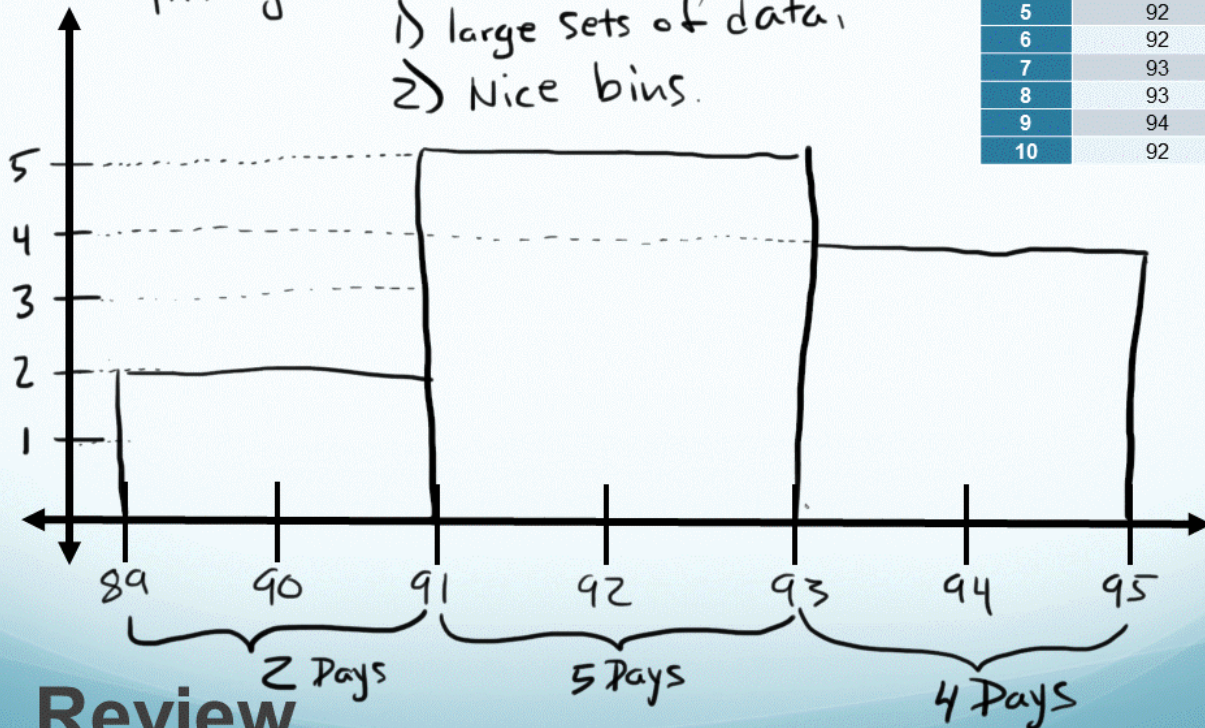
Review

Construct a **Histogram** from the following data:

Histograms need:

- 1) large sets of data.
- 2) Nice bins.

Day	Temperature
1	89
2	89
3	91
4	92
5	92
6	92
7	93
8	93
9	94
10	92



Review

Unit 2: Data

Day 4/7: Two Way Frequency Tables

u2d4 NOTES

The INDEX starts your notes for every Unit!

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UNIT 2

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Two-Way Frequency Tables

Class Notes-----Classwork-----Homework



LETS SHOOOOT FOR IT

Two-Way Frequency Tables

Class Notes-----Classwork-----Homework

	Hits	misses	Total
Boys	8	13	21
Girls	5	4	9
Total	13	17	30

Joint Frequencies

Inside #'s are called:

Marginal Frequencies

Outside #'s are called:

LETS SHOOOOT FOR IT

Let's start with a little magic!

This is a Magic Square

6	7	2
1	5	9
8	3	4

1, 3, 4, 5, 8, → Guess the middle one

The challenge is to insert the numbers 1 – 9 in the squares, using each number only once.

and

Every column, row, and diagonal must add up to the same total: 15. Like magic!



Understanding the magic

How did you figure out where to put each of the numbers?

6	7	2
1	5	9
8	3	4

8	3	4
1	5	9
6	7	2

Two-Way Frequency Tables

Class Notes-----Classwork-----Homework

Definition:

Two-Way Frequencies are nice ways to show the relationship between two sets of data.

For example

	Shots	totals
Gender		
totals		

Joint Frequency

Marginal Frequency

Two-Way Frequency Tables

Class Notes-----Classwork-----Homework

Definition:

Two-way frequency tables are a visual representation of the possible relationships between two sets of categorical data.

A total of 33 students were surveyed about which artist they like the best.

Use your knowledge of “Magic Squares” to complete the table:

	<i>Kanye</i>	<i>Jay-Z</i>	<i>Beyonce</i>	<i>Total</i>
<i>Freshmen</i>		6	3	15
<i>Sophomores</i>		2	5	9
<i>Juniors</i>				
<i>Total</i>	11	10		

Handwritten annotations in red and green show the process of solving the table. Red arrows and text indicate that for Freshmen, 6 (Jay-Z) plus 3 (Beyonce) equals 15 (Total). Green arrows and text indicate that for Sophomores, 2 (Jay-Z) plus 5 (Beyonce) equals 9 (Total). A green arrow also points from the total of 10 for Jay-Z to the 2 in the Sophomores row.



	<i>Kanye</i>	<i>Jay-Z</i>	<i>Beyonce</i>	<i>Total</i>
<i>Freshmen</i>	6	6	3	15
<i>Sophomores</i>	2	2	5	9
<i>Juniors</i>	3	2	4	9
<i>Total</i>	11	10	12	33



Vocabulary used with two-way frequency tables

	legos	painting	total
boys	37	8	45
girls	26	14	40
total	63	22	85

The data in the middle of the table are called the **joint frequencies**.

The data on the edges of the table are called the **marginal frequencies**

Two-Way Frequency Tables

- *Class Notes-----Classwork-----Homework*

Vocab 1: Joint Frequency

The numbers that are in the middle that show a relationship between two categories of data.

Two-Way Frequency Tables

Class Notes-----Classwork-----Homework

Vocab 1: Marginal Frequency

The numbers on the outside that keep track of the totals



Rainy Day Fun



The Summer Camp for Kids staff is planning an indoor activity for the campers to do on rainy days.

They are considering a Lego activity and a finger painting activity.



They send out a survey to all the kids who will be coming to the camp to find out their preferences.

A summer camp surveyed its campers. It found that of the 45 total boys, 37 preferred Legos. There are 26 girls that also prefer Legos. Fourteen girls like painting.



A summer camp surveyed its campers. It found that of the 45 total boys, 37 preferred Legos. There are 26 girls that also prefer Legos. Fourteen girls like painting.

	Legos	Painting	total
Boys	37		45
Girls	26		
total		14	

What this two-way frequency table tells us

	Legos	painting	total
boys	37 ^①	8	45
girls	26 ^②	14	40 ^④
total	63	22 ^③	85 ^⑤



1. How many boys preferred Legos? 37
2. How many girls preferred Legos? 26
3. How many campers preferred painting? 22
4. How many girls responded to the survey? 40
5. How many campers responded to the survey? 85

Felipe surveyed students at his school. There were 66 boys. Of those boys, 57 of them prefer 2 Chainz. 13 girls prefer 2 Chainz. 32 total students prefer Justin Bieber.



Felipe surveyed students at his school. There were 66 boys. Of those boys, 57 of them prefer 2 Chainz. 13 girls prefer 2 Chainz. 32 total students prefer Justin Bieber.

	2chainz	J-biebs	total
Boys	57		66
Girls	13		
total		32	

CLASSWORK / hw

- #657 -
I CAN ACCEPT FAILURE,
EVERYONE FAILS AT
SOMETHING. BUT I CAN'T
ACCEPT NOT TRYING.

- MICHAEL JORDAN -
[BAKEDGOODZ.TUMBLR]