

# Warm UP (8min)

I took a poll of where my students were born in my intensive class.

Jose was born in the Dominican republic. Cristofer was born in Haiti. Cabrera was born in Chicago. Carlos was born in Miami. Colston was born in Cuba. Cooper was born in Haiti. Frazier was born in Guatemala. Derrick was born in Cuba. Jackson was born in Haiti. Junior was born in Haiti. Miguel was born in the Dominican republic. Alina was born in Cuba. Oscar was born in Haiti.

How many students were born on an island?

Which country has the most births?



# Warm UP (8min)

Jose was born in the Dominican republic. }  
Miguel was born in the Dominican republic. } 2

Cristofer was born in Haiti. }  
Cooper was born in Haiti. }  
Jackson was born in Haiti. } 5  
Junior was born in Haiti. }  
Oscar was born in Haiti. }

Derrick was born in Cuba. }  
Alina was born in Cuba. } 2  
Colston was born in Cuba. }

Cabrera was born in Chicago. }  
Carlos was born in Miami. } 2

Frazier was born in Guatemala. } 1

When the same data is written in an organised way it is really easy to understand.

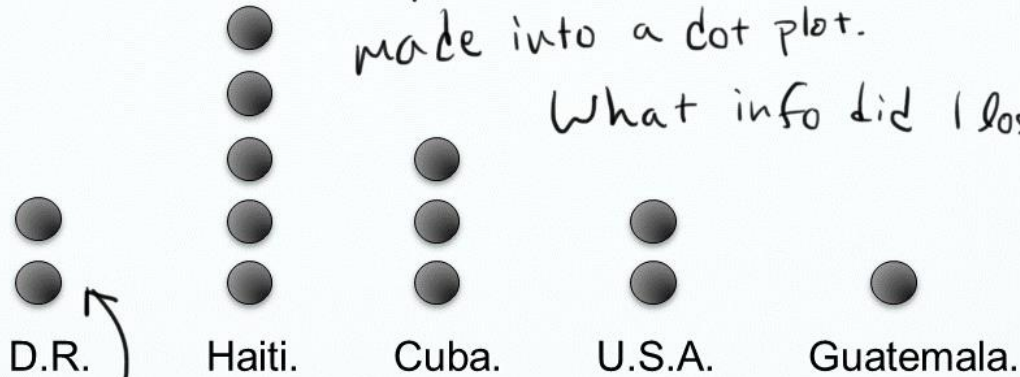




# Warm UP (8min)

The same data can be made into a dot plot.

What info did I lose?



We lose the names!  
but that doesn't really matter most of the time!



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- City Year
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- Texting / Emails **(269) 281-3820**
- Binders / Notes
- Remind.com
- Streaming HW Help
- Detentions

I may be able to get a twitch stream up this weekend.



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Algebra 1

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- Unit 1 Numbers, Algebraic Expressions, and Exponents
  - [u1d1 Class Rules, What are Numbers](#)
  - [u1d2 Properties of Real Numbers and Number Types](#)
  - [u1d3 Quiz and Baseline Test](#)

remind

A safe way for teachers to text message students and stay in touch with parents. **Free.**



# Remind.com

To receive messages via text, text **@67ac4** to **81010**. You can opt-out of messages at anytime by replying, 'unsubscribe @67ac4'.

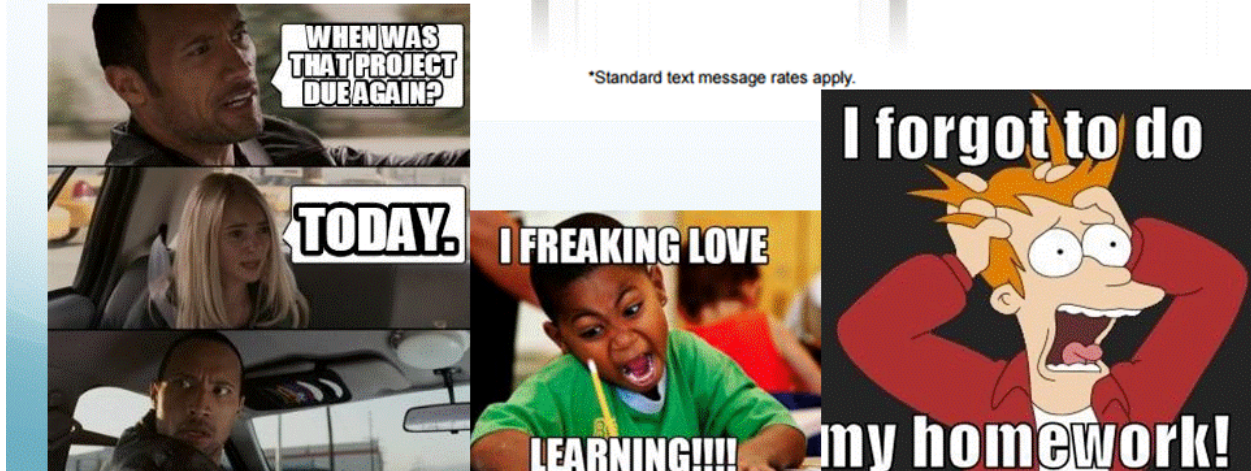
Trouble using 81010? Try texting **@67ac4** to **(786) 837-6620** instead.



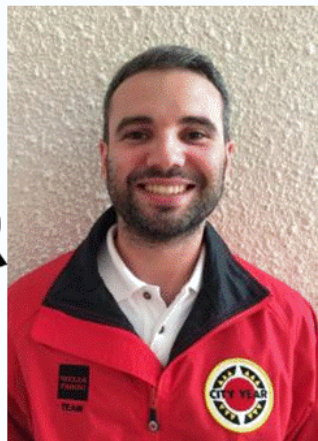
Enter this number

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\*Standard text message rates apply.



Room 147 The best way to get your grade up is to spend time with City Year!

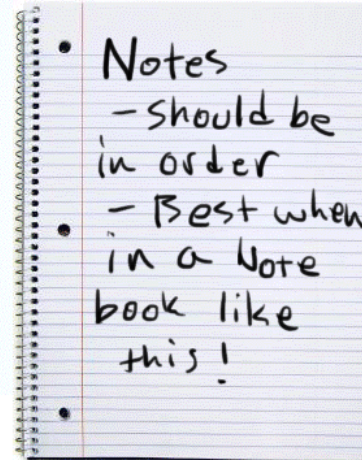




## Binders / Notes

- Unit 1 Numbers, Algebraic Expressions, and Exponents
  - [u1d1 Class Rules, What are Numbers](#)
  - [u1d2 Properties of Real Numbers and Number Types](#)
  - [u1d3 Quiz and Baseline Test](#)
  - [u1d4 PEMDAS and Algebraic Expressions](#)
  - [u1d5 Like Terms, Distribution](#)
  - [u1d6 Review and Exponents](#)
  - [u1d7 Exponents](#)
  - [u1d8 Exponents with Fractions and Roots](#)
  - [u1d9 Emergency Review](#)
  - [u1d10 TEST \(Review Key JUST POSTED\)](#)
- Unit 2 Data and Measures of Center
  - u2d1 Dot Plots and Histograms
  - u2d2 Day 2
  - u2d3 Day 3
  - u2d4 Day 4
  - u2d5 Day 5
  - u2d6 Day 6
  - u2d7 Test

INDEX WITH PAGE NUMBERS



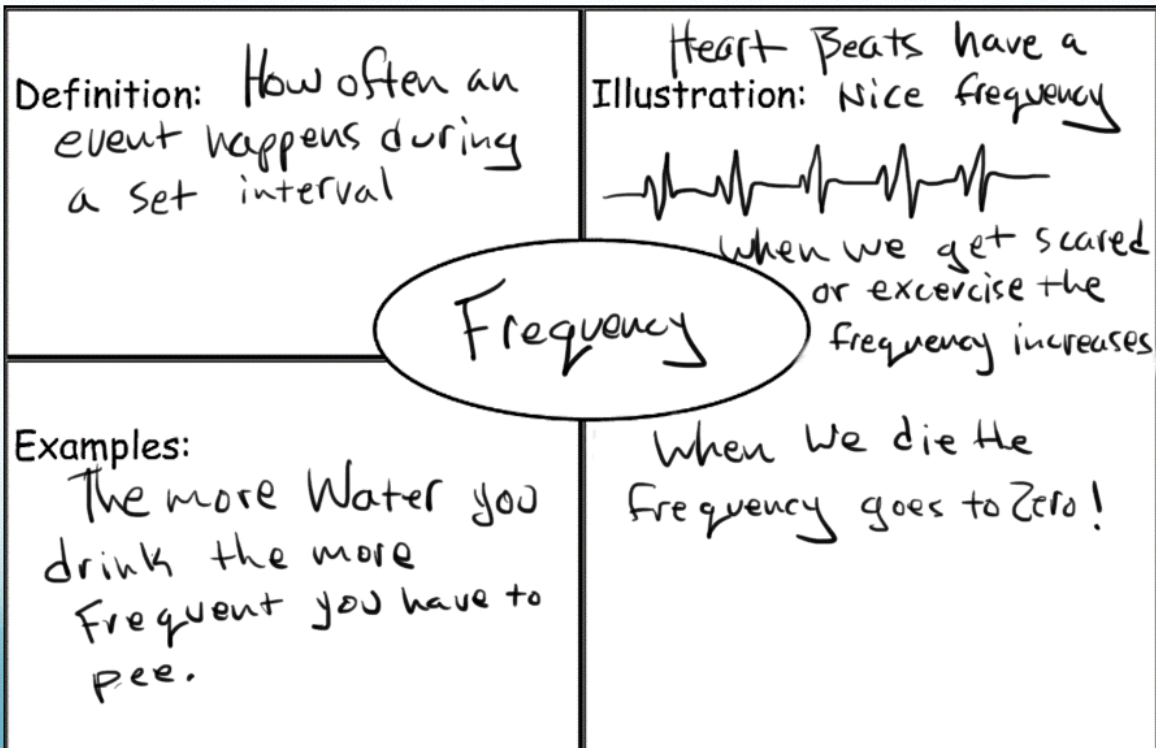
## Vocab

~ Interval ~ Histogram ~ Frequency ~

<p>Definition: A section of data. A range of values. A "bin" of data that is grouped together</p>	<p>Illustration:</p> <p>Interval</p>
<p>Examples: Jan ↔ Feb  0 ↔ 40 ↔ 80 ↔ 120 grouped together</p>	

# Vocab

~ Interval ~ Histogram ~ Frequency ~



## Unit 2: Data

**Essential Question:** When should I represent data with a **dot plot** and when should I use a **histogram**?

### Day 1/7: Dot Plots and Histograms



# u2d1 NOTES

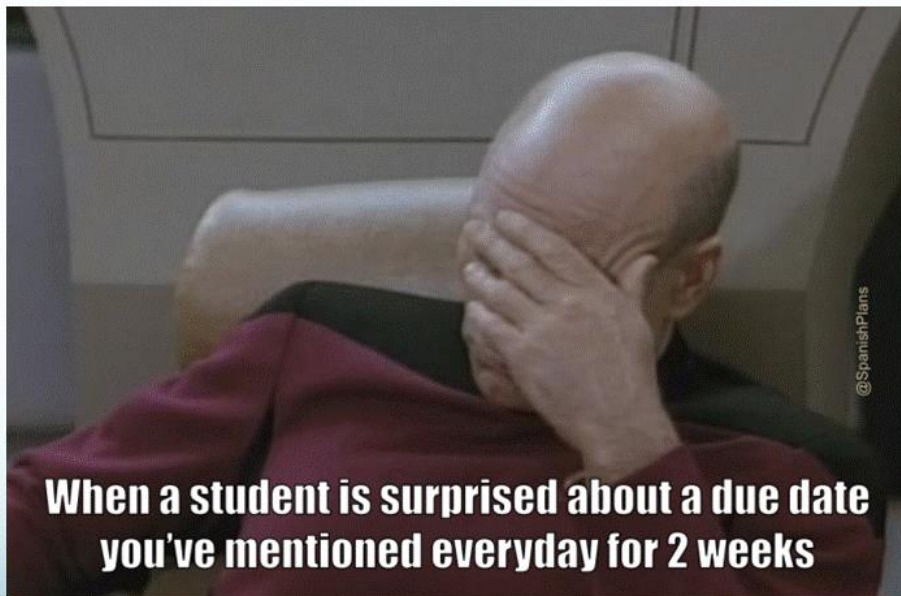
The INDEX starts  
your notes for  
every Unit!

Index: ←

## UNIT 1

<b>u2d1</b>	<b>Dot Plots and Histograms.....</b>	<b>Page 1</b>
u2d2	Box Plots and Review.....	Page ____
u2d3	Data Analysis.....	Page ____
u2d4	PEMDAS and Algebraic Expressions .....	Page ____
u2d5	Two-ways Frequency Tables .....	Page ____
u2d6	Two-ways Frequency Tables Review.....	Page ____
u1d7	TEST.....	Page ____

## Day 1/7: Dot Plots and Histograms





# Data

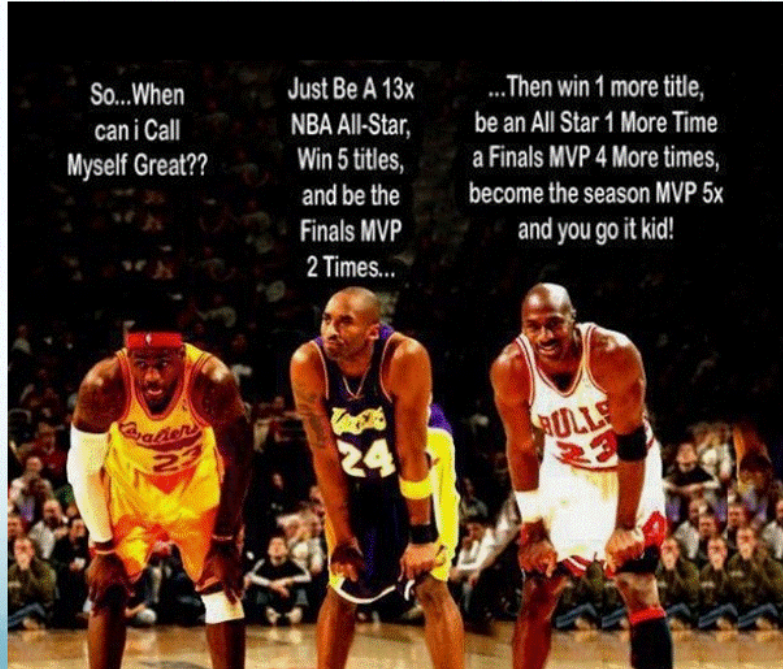
# NOTES

Who is the better player:

- Kobe
- LeBron
- Jordan

Awards?  
Titles?  
Stats?  
Appearance?  
Money?

Which is the best way to decide who is the best?



So...When can i Call Myself Great??

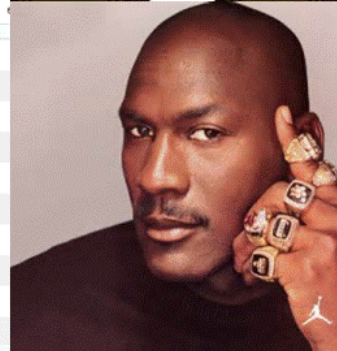
Just Be A 13x NBA All-Star, Win 5 titles, and be the Finals MVP 2 Times...

...Then win 1 more title, be an All Star 1 More Time a Finals MVP 4 More times, become the season MVP 5x and you got it kid!

SEASON	TEAM	GP	GS	MIN	FGM-A	FG%	3PM-A	3P%	FTM-A	FT%	OR	DR	REB	A
'03-'04	CLE	79	79	39.5	7.9-18.9	.417	0.8-2.7	.290	4.4-5.8	.754	1.3	4.2	5.5	
'04-'05	CLE	80	80	42.4	9.9-21.1	.472	1.4-3.9	.351	6.0-8.0	.750	1.4	6.0	7.4	
'05-'06	CLE	79	79	42.5	11.1-23.1	.480	1.6-4.8	.335	7.6-10.3	.738	1.0	6.1	7.0	
'06-'07	CLE	78	78	40.9	9.9-20.8	.476	1.3-4.0	.319	6.3-9.0	.698	1.1	5.7	6.7	
'07-'08	CLE	75	74	40.4	10.6-21.9	.484	1.5-4.8	.315	7.3-10.3	.712	1.8	6.1	7.9	
'08-'09	CLE	81	81	37.7	9.7-19.9	.489	1.6-4.7	.344	7.3-9.4	.780	1.3	6.3	7.6	
'09-'10	CLE	76	76	39.0	10.1-20.1	.503	1.7-5.1	.333	7.8-10.2	.767	0.9	6.4	7.3	
'10-'11	MIA	79	79	38.8	9.6-18.8	.510	1.2-3.5	.330	6.4-8.4	.759	1.0	6.5	7.5	
'11-'12	MIA	62	62	37.5	10.0-18.9	.531	0.8-2.4	.362	6.2-8.1	.771	1.5	6.4	7.9	
'12-'13	MIA	76	76	37.9	11.7-21.9	.534	1.4-3.3	.406	5.3-7.0	.753	1.3	6.8	8.0	
'13-'14	MIA	77	77	37.7	11.3-21.7	.567	1.5-4.0	.379	5.7-7.6	.750	1.1	5.9	6.9	
'84-'85	CHI	82	82	38.3	10.2-19.8	.515	0.1-0.6	.173	7.7-9.1	.845	2.0	4.5	6.5	
'85-'86	CHI	18	7	25.1	8.3-18.2	.457	0.2-1.0	.167	5.8-6.9	.850	1.6	2.2	3.6	
'86-'87	CHI	82	82	40.0	13.4-27.8	.482	0.1-0.8	.182	10.2-12.7	.850	2.0	5.2	5.2	
'87-'88	CHI	82	82	40.4	10.9-24.4	.533	0.1-0.6	.132	8.8-10.5	.841	1.7	3.8	5.5	
'88-'89	CHI	81	81	40.2	11.9-22.2	.538	0.3-1.2	.276	8.3-9.8	.850	1.8	6.2	8.0	
'89-'90	CHI	82	82	39.0	12.6-24.0	.526	1.1-3.0	.376	7.2-8.5	.848	1.7	5.2	6.9	
'90-'91	CHI	82	82	37.7	12.2-23.4	.539	0.4-1.1	.312	7.0-8.2	.851	1.4	4.6	6.0	
'91-'92	CHI	80	80	38.3	11.8-23.7	.519	0.3-1.3	.270	6.1-7.4	.832	1.1	5.3	6.4	
'92-'93	CHI	78	78	39.3	12.7-23.7	.495	1.0-2.9	.352	6.1-7.3	.837	1.7	5.0	6.7	
'94-'95	CHI	17	17	39.3	9.8-23.8	.411	0.9-1.9	.500	6.4-8.0	.801	1.5	5.4	6.9	
'96-'97	LAL	71	6	15.5	2.5-5.9	.417	0.7-1.9	.375	1.9-2.3	.819	0.7	1.2	1.9	
'97-'98	LAL	79	1	26.0	4.9-11.6	.428	0.9-2.8	.341	4.6-5.8	.794	1.0	2.1	3.1	
'98-'99	LAL	50	50	37.9	7.2-15.6	.465	0.5-2.0	.267	4.9-5.8	.839	1.1	4.2	5.3	
'99-'00	LAL	66	62	38.2	8.4-17.9	.468	0.7-2.2	.319	5.0-6.1	.821	1.6	4.7	6.3	
'00-'01	LAL	68	68	40.9	10.3-22.2	.464	0.9-2.9	.305	7.0-8.2	.853	1.5	4.3	5.9	
'01-'02	LAL	80	80	38.3	9.4-20.0	.469	0.4-1.7	.250	6.1-7.4	.829	1.4	4.1	5.5	
'02-'03	LAL	82	82	41.5	10.6-23.5	.451	1.5-4.0	.383	7.3-8.7	.843	1.3	5.6	6.9	
'03-'04	LAL	65	64	37.6	7.9-18.1	.438	1.1-3.3	.327	7.0-8.2	.852	1.6	3.9	5.5	

Too Much!

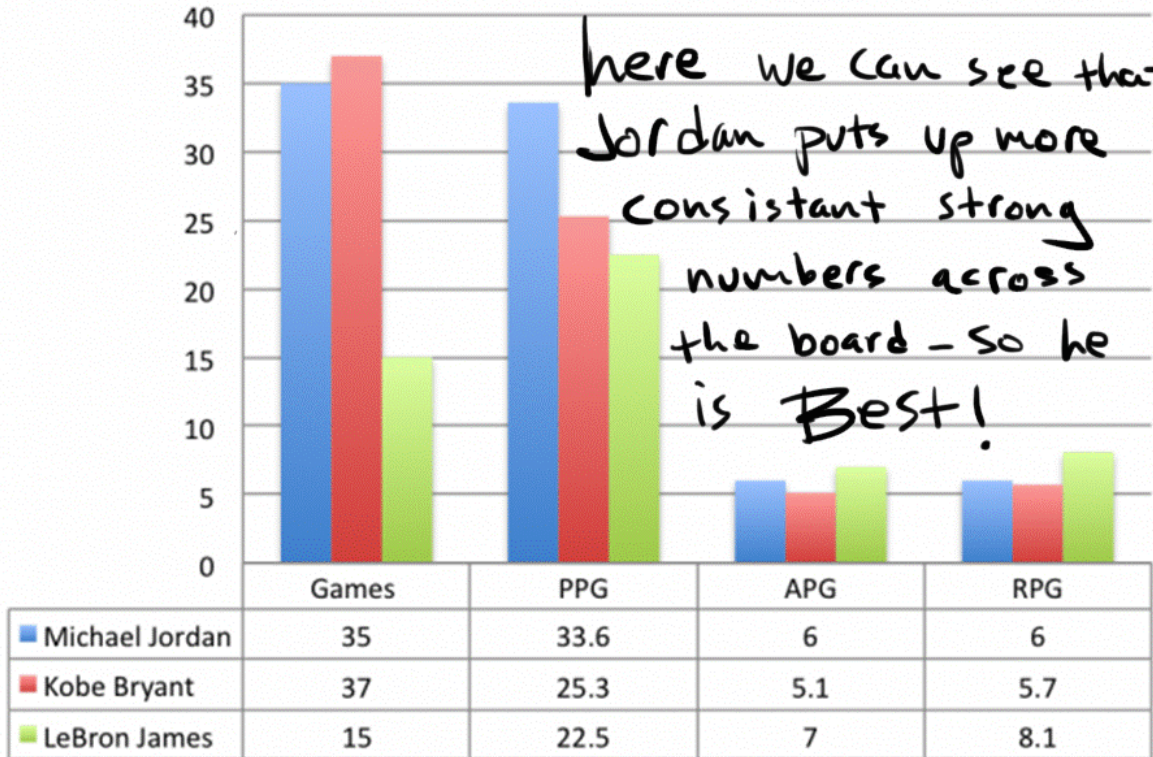
We need a better way!





# Data

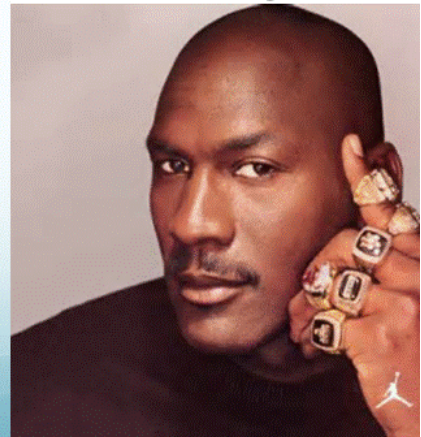
## NBA Finals Stats: Jordan, Bryant & James



## Representing Data **NOTES**

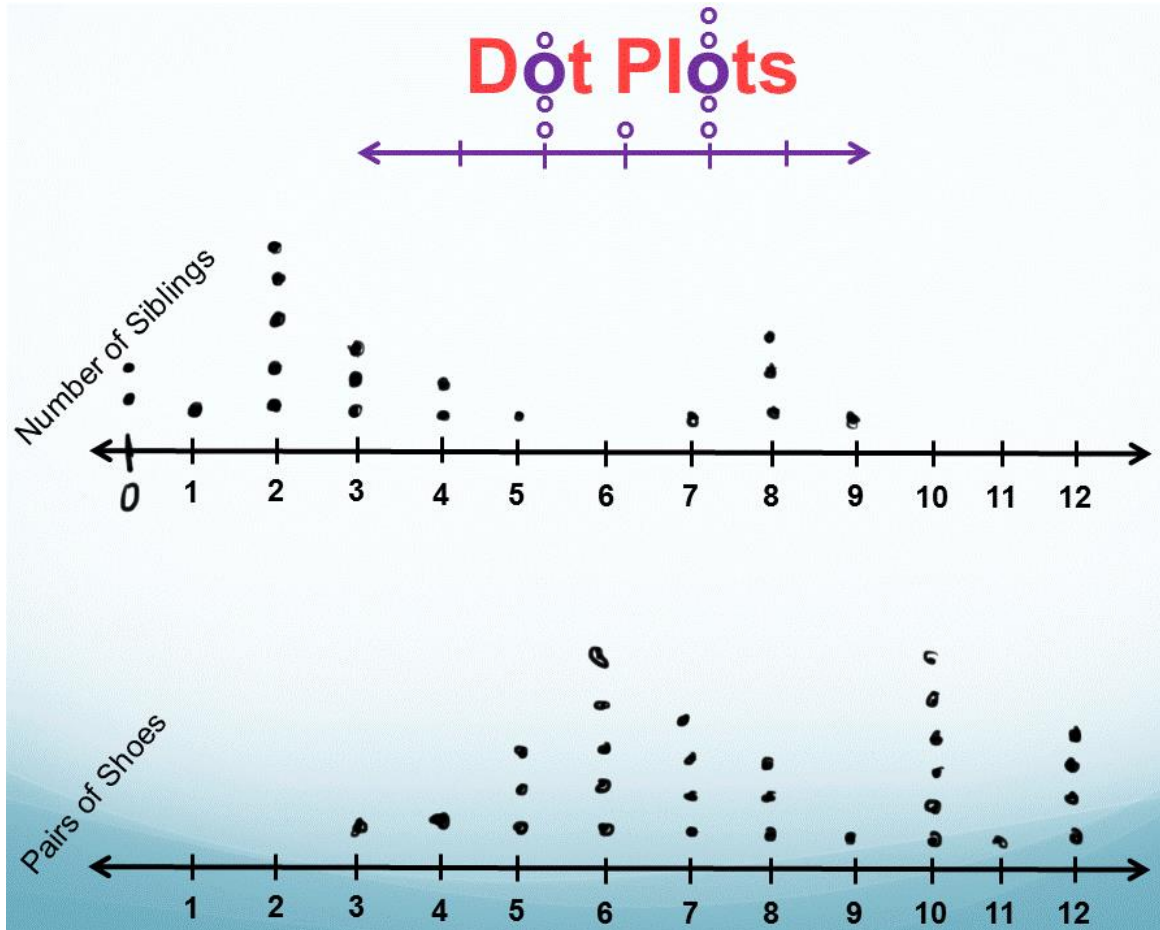
- Data by itself is just a set of numbers – our job as mathematicians is to tell the story of the data.
- Organizing data in different ways lets us understand the data better.
- Different ways to represent: **dot plots**, **histograms** and **box plots**.

I hope these students are taking **notes**!





# Dot Plots



# Dot Plots

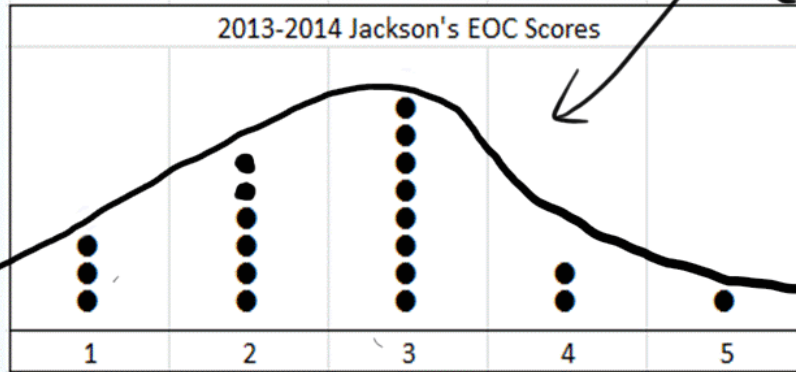
Dot Plot #1		Dot Plot #2		Dot Plot #3	
Student #	Jackson	Student #	Doral	Student #	Maverick
Student 1	1	Student 1	5	Student 1	1
Student 2	2	Student 2	5	Student 2	1
Student 3	2	Student 3	2	Student 3	2
Student 4	3	Student 4	5	Student 4	1
Student 5	4	Student 5	5	Student 5	2
Student 6	1	Student 6	4	Student 6	1
Student 7	2	Student 7	5	Student 7	1
Student 8	3	Student 8	5	Student 8	1
Student 9	5	Student 9	3	Student 9	1
Student 10	3	Student 10	5	Student 10	3
Student 11	3	Student 11	5	Student 11	1
Student 12	2	Student 12	5	Student 12	1
Student 13	2	Student 13	5	Student 13	1
Student 14	1	Student 14	5	Student 14	2
Student 15	3	Student 15	4	Student 15	1
Student 16	4	Student 16	5	Student 16	1
Student 17	3	Student 17	5	Student 17	1
Student 18	2	Student 18	5	Student 18	3
Student 19	3	Student 19	4	Student 19	1
Student 20	3	Student 20	5	Student 20	1



# Dot Plots



Since most of the Data is in the middle its called:



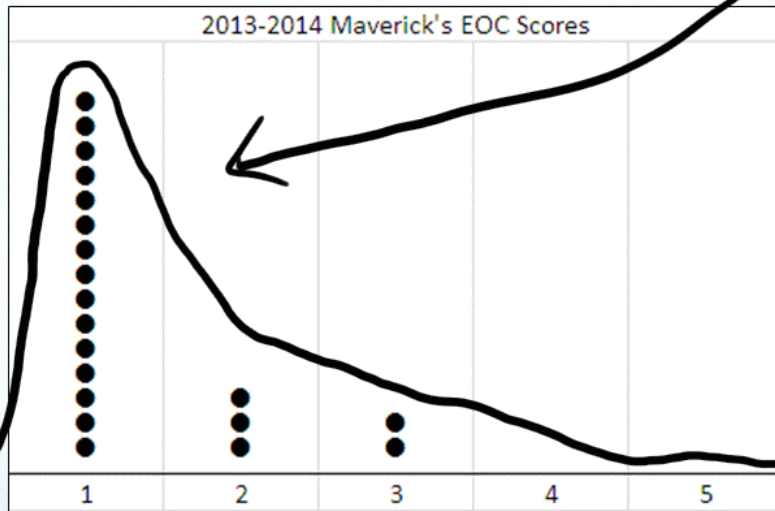
Normal

EOC Scores

# Dot Plots



Most of the Data is on the LEFT



So its called: **RIGHT SKEWED**

?  
Weird

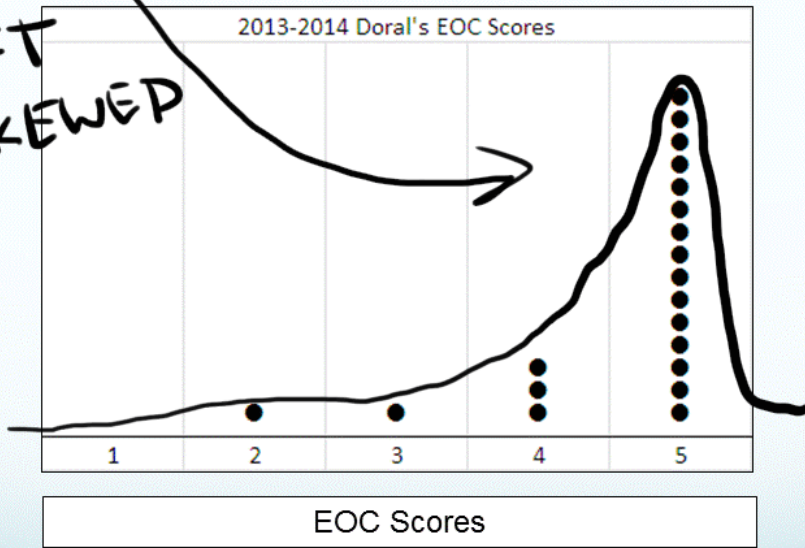
EOC Scores



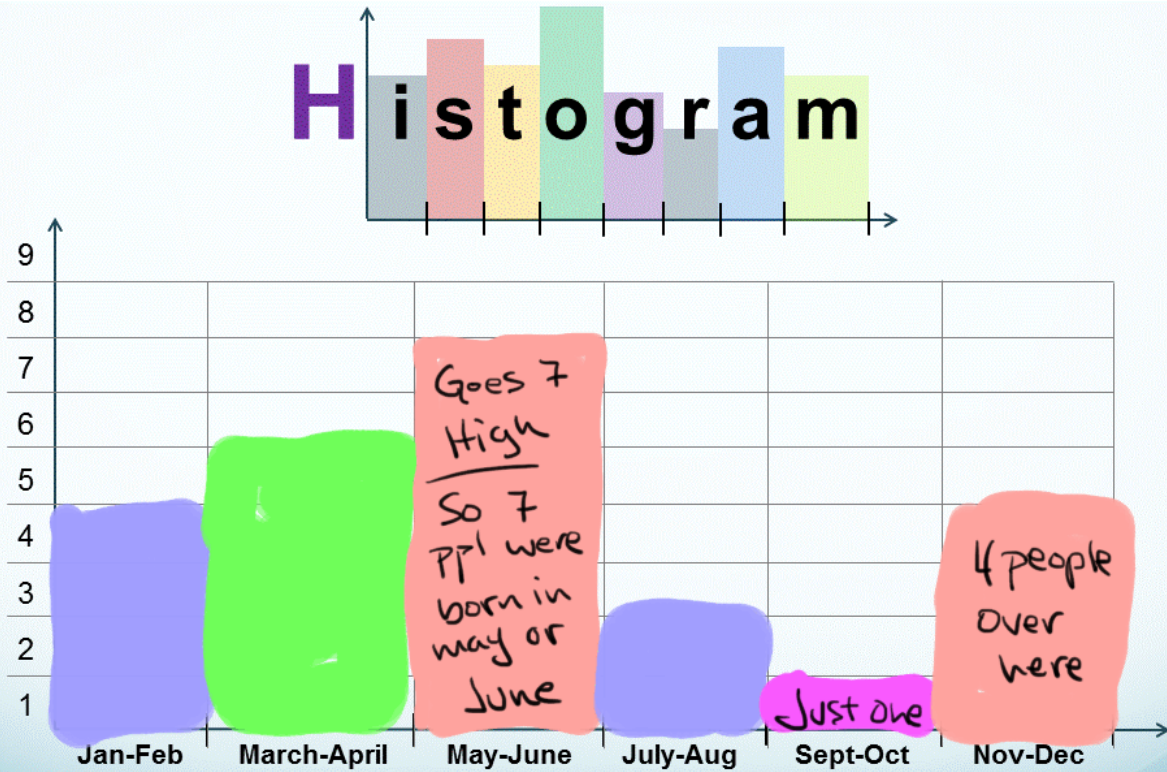
# Data on the Right **Dot Plots**

So

**LEFT  
SKEWED**



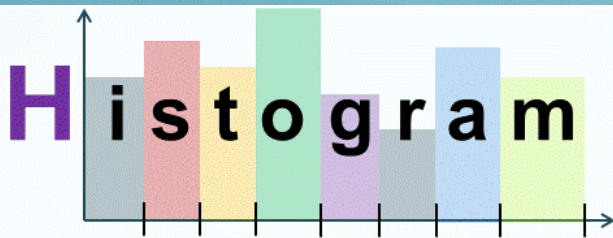
# Histogram







- Similar to a dot plot, but type of graph that shows the frequency distribution of data within equal intervals (thus, there are no spaces between the bars).
- It shows the number of values within an interval and not the actual values.
- You can graph **huge data sets** easily with histograms.
- You could change the intervals of the histogram to see which gives a better description of the data.



**Good** when your data set is large and can be split into easy sections.

To construct a histogram, the first step is to "bin" the range of values.



**Good** when your data set has integer values and doesn't need to be split up.

**Bad** when you have too much variation in your data

To construct a dot plot the first step is to identify which part of the data is the frequency and which part of the data is the "plotted value"