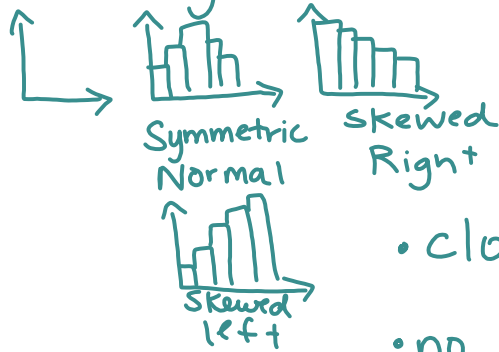


# Overview & Vocabulary

## Dot Plot

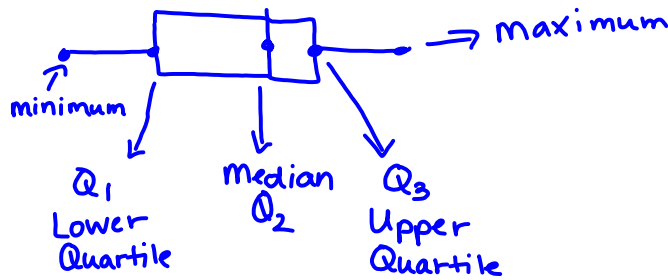
- frequency
- distribution

## Histogram



- closely grouped
- no outliers
- mean
- standard deviation

## Box Plot



- spread out
- median
- Interquartile Range (IQR)

$$Q_3 - Q_1 = IQR$$

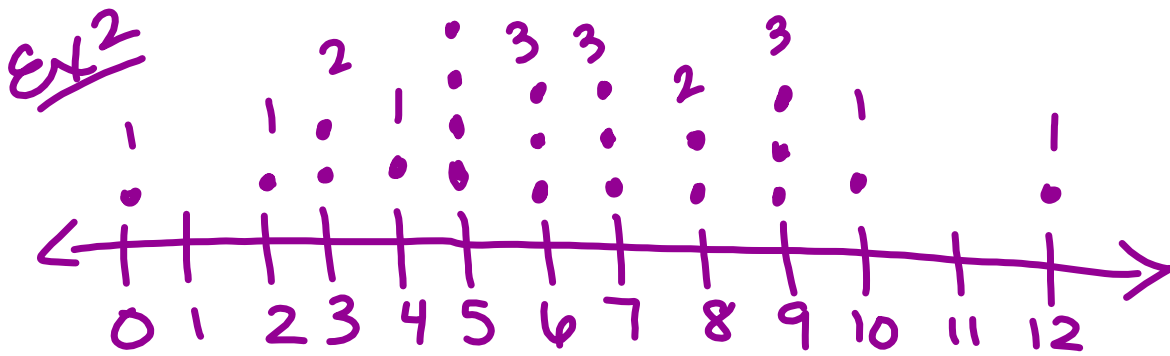
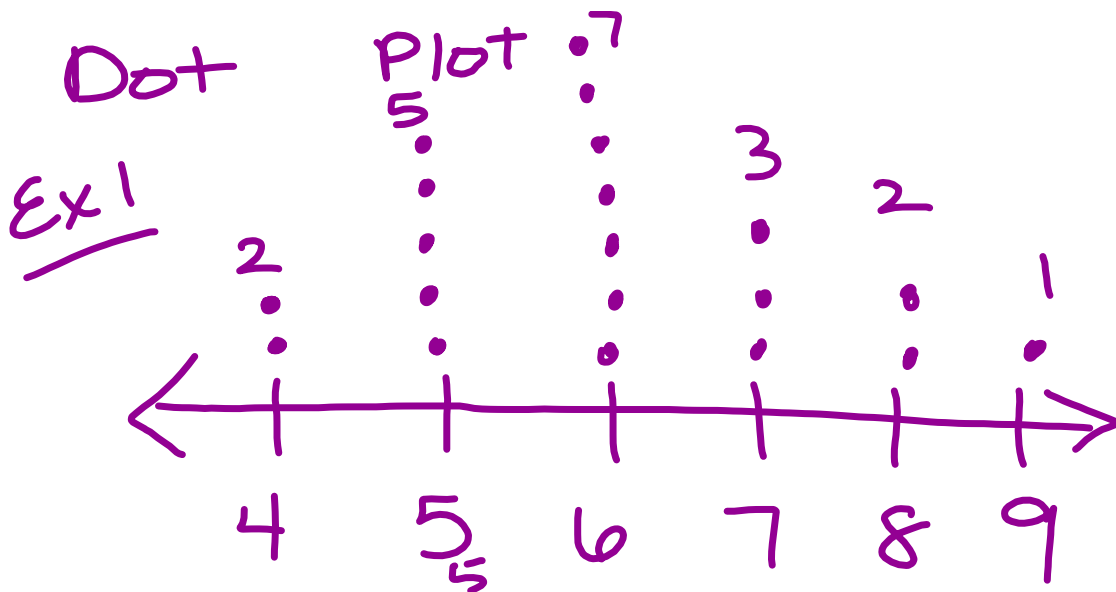
Outlier

$$Q_1 - 1.5(IQR)$$

$$Q_3 + 1.5(IQR)$$

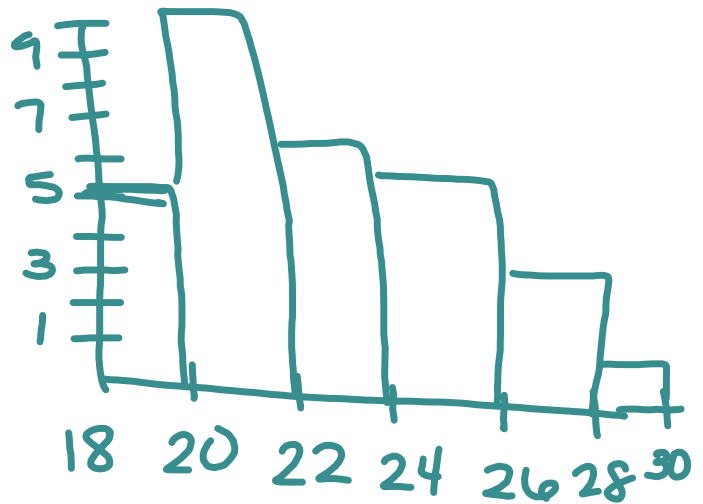
## Two-Way Frequency

	R	B	G	T	
G					Join + Freq. # total
B					
T					
	Margin Frequency: # total				



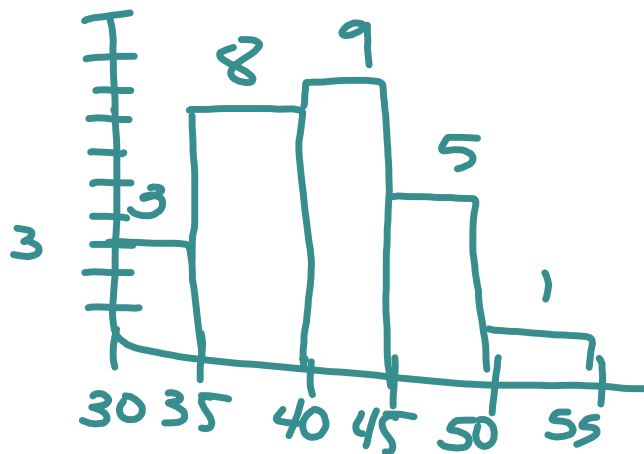
# Histogram

18-20	<del>    </del>	= 5	
20-22			10
22-24			6
24-26		5	
26-28		3	
28-30		1	



## Ex 4

30-35	3
35-40	8
40-45	9
45-50	5
50-55	1





Jenny surveyed 100 of her classmates on hair and eye color.

	Blond	Brunette	Red	TOTAL
Blue	18	9	1	28
Brown	13	23	5	41
Hazel	9	16	6	31
TOTAL	40	48	12	100

In a survey of 150 students, 40% said they have a cat. Of the students that have a cat, 60% also have a dog  
Of the students that do not have a cat, 80% have a dog.

	Dog	No Dog	TOTAL
Cat	36	24	60
No Cat	72	18	90
TOTAL	108	42	150