

## 2.3: Other graphs

Dot plot

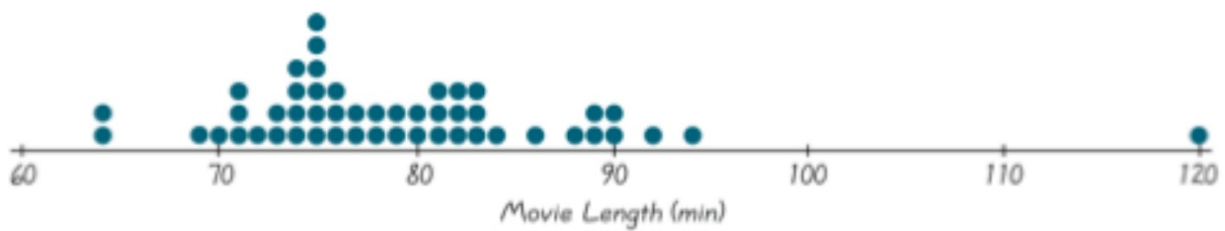
Stem plot (stem and leaf)

Circle graph

Scatter diagram

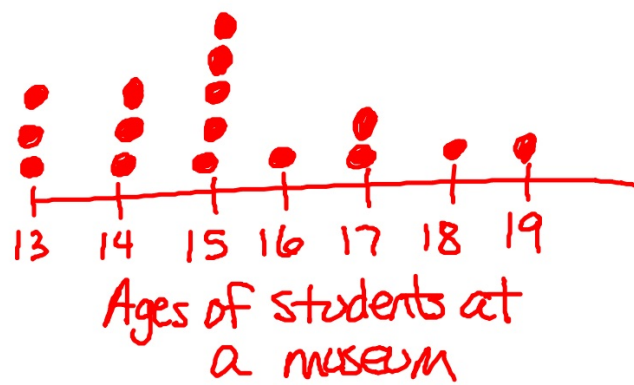
## Dot plot

**Consists of a graph in which each data value is plotted as a point along a scale of values**



Dot plot (ages of students at a museum)

13 15 16 17 13 18 15 14 14 15 13 15  
17 19 14 15



## Stem Plot

Represents data by separating each value into two parts: the stem (such as the leftmost digit) and the leaf (such as the rightmost digit)

Stem-and-Leaf Plot

Stem (tens)	Leaves (units)
6	449
7	01112334444555555666778899
8	0011122233346899
9	0024
10	
11	
12	0

← Values are 64, 64, 69.

$$64 \div 4 = 64$$

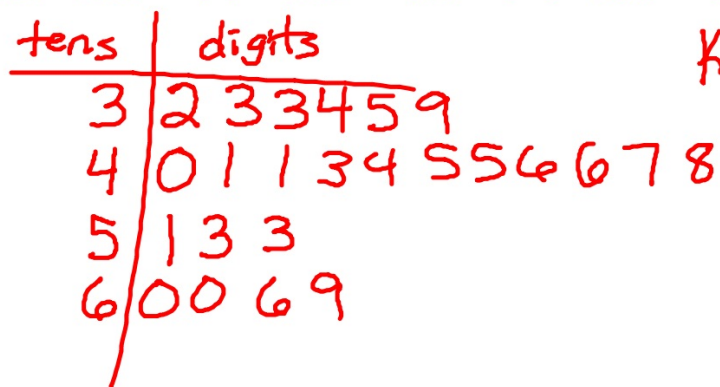
← Value is 120.

$$\begin{array}{r|l} & \\ 4 & 1 = 4.1 \\ 3 & 7 = 3.7 \\ \hline 2 & 01 \\ 3 & 01137 \\ 4 & 112999 \\ 5 & 01 \end{array}$$

## Stem Plot

Amount of water (in gallons) consumed by 24 elephants

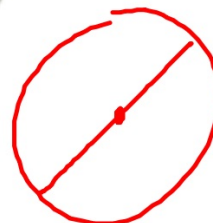
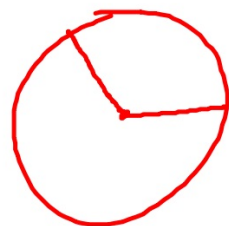
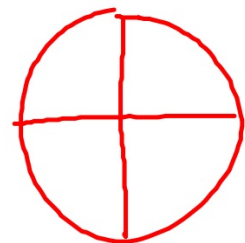
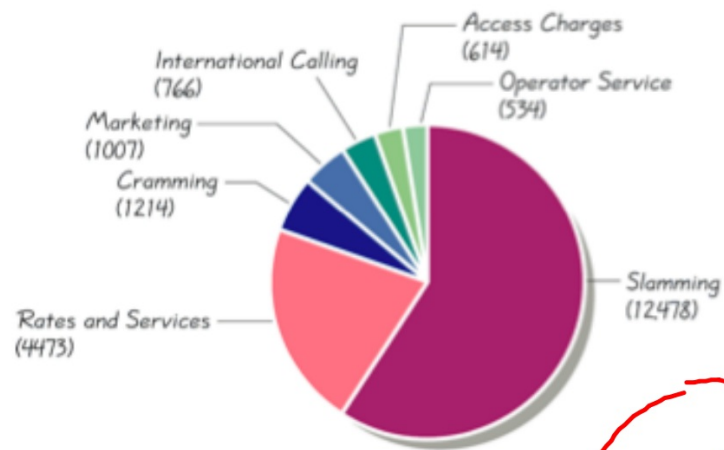
33 45 34 47 43 48 35 69 45 60 46 51  
41 60 66 41 32 40 44 39 46 33 53 53



Key:  $3|2 = 32$   
gallons of  
water  
consumed  
by an  
elephant

## Circle Graph

**A graph depicting qualitative data as slices of a pie**



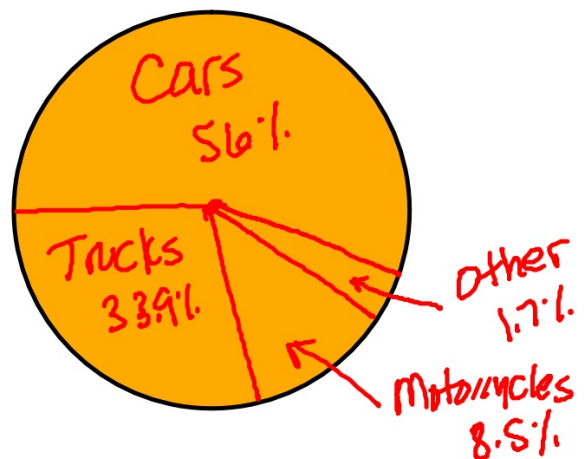
## Circle Graph

### Motor vehicle occupants killed in 2001

Cars	20,269	56.1%
Trucks	12,260	33.9%
Motorcycles	3,067	8.5%
Other	610	1.7%

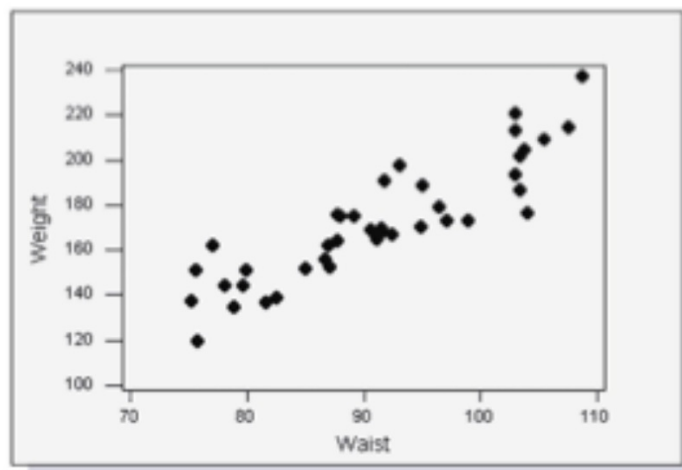
Total: 36,206

Motor Vehicle  
Occupants Killed in 2001



## Scatter diagram

**A plot of paired (x,y) data with a horizontal x-axis and a vertical y-axis**



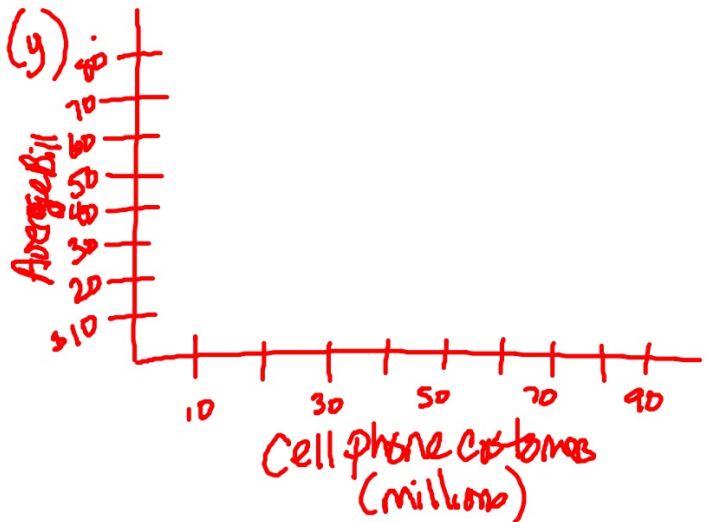


## Scatter Diagram

Cell phone  
customers  
(in millions) (x)

Average bill  
(in dollars) (y)

7.6	72.74
11	68.68
16	61.48
24.1	56.21
33.8	51.00
44	47.70
55.3	42.78
69.2	39.43
86	41.24



## Scatter Diagram

Cell phone  
customers  
(in millions)

Average bill  
(in dollars)

7.6

72.74

11

68.68

16

61.48

24.1

56.21

33.8

51.00

44

47.70

55.3

42.78

69.2

39.43

86

41.24

