

Describe a distribution

Center

Shape

Spread

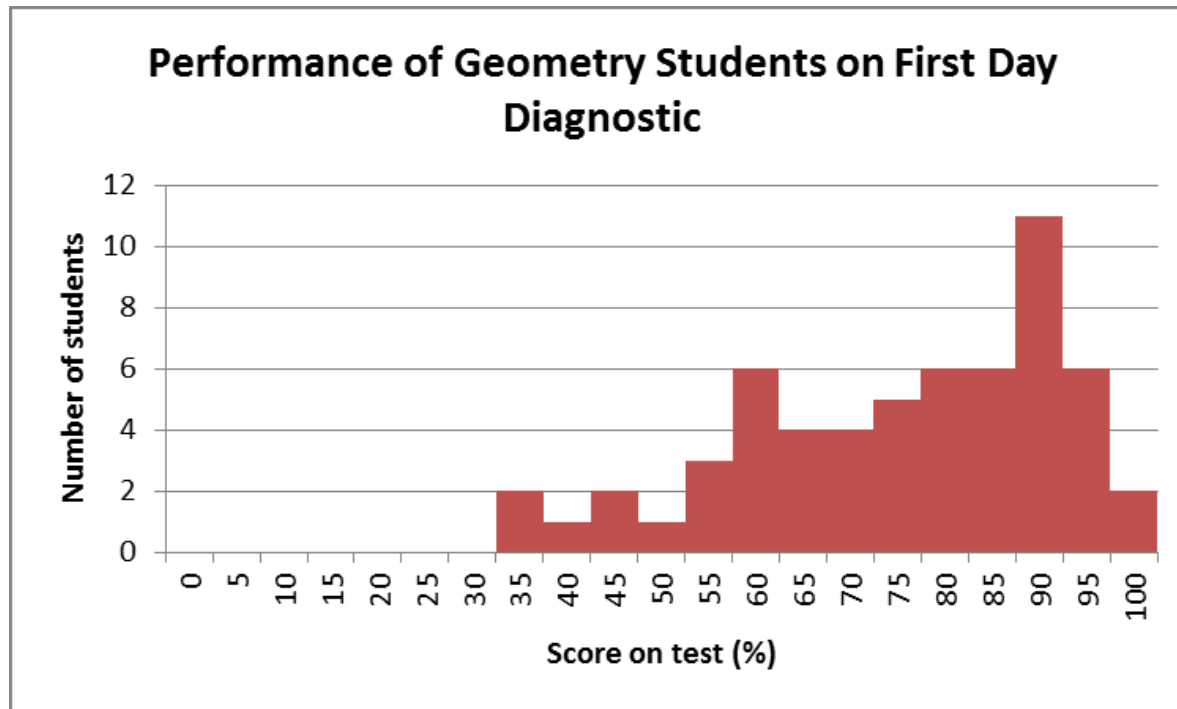
Outliers

Make stemplot

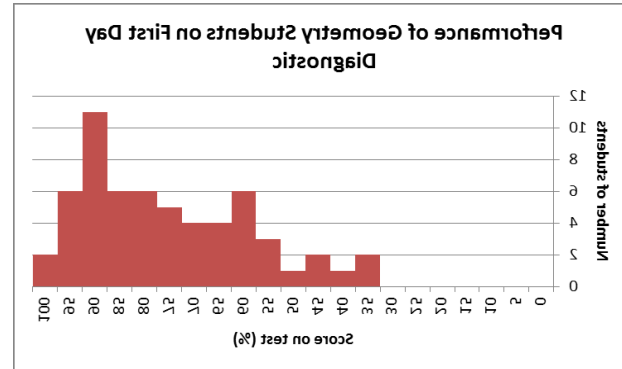
Make histogram

Back-to-back stem plot

Write the newspaper article about this:



[Net.Pay](#)



Center of distribution: Do not DISCUSS CENTER, we will discuss mean and median later. For now say, "average" or "typical"

Shape: Symmetric, skewed left, skewed right, bimodal, uniform

Spread: The range: State the minimum and the maximum. From ____ to ____

Outliers: Except...

Anything that breaks the nice pattern you have described so far.

Shape: Symmetric, skewed left, skewed right, Bimodal

Symmetric



Skewed left reaches left



Skewed right reaches right

"Left" is always smaller numbers
"Right" is always bigger numbers
Even if the graph is oriented differently



Bimodal



Uniform



Spread:

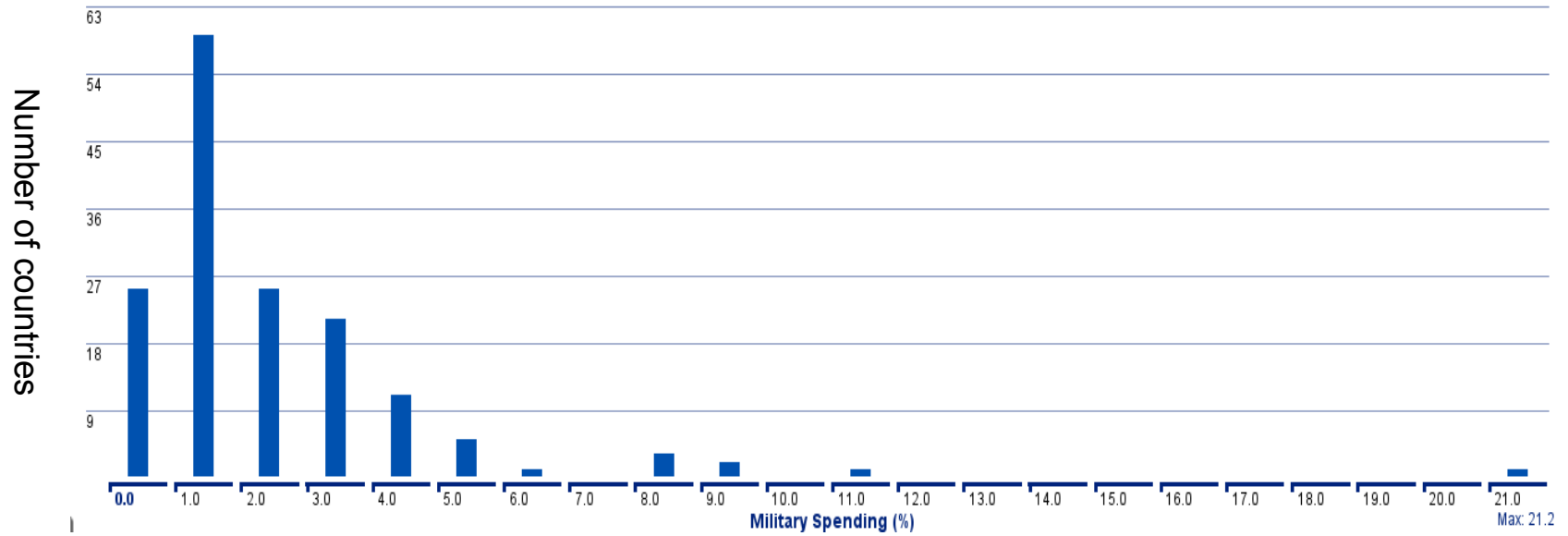
For range say

It is from _____ to _____
min max

But always say, for a difference of _____.

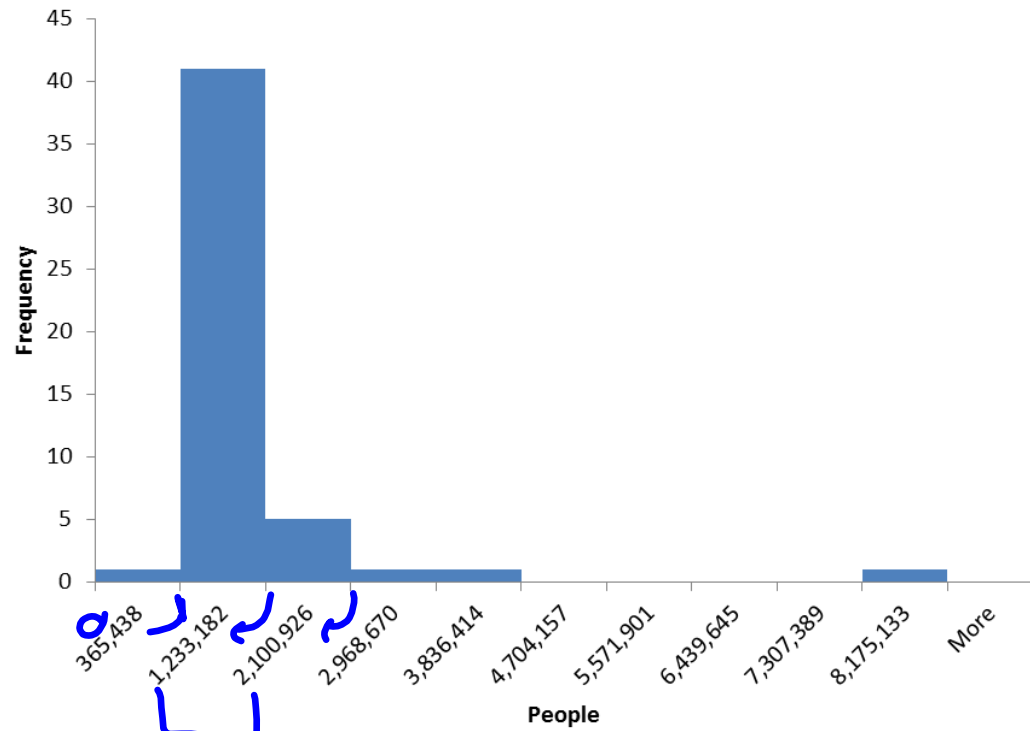
Outliers

Government expenditure on the military as a percent of GDP in 2000



Except for values at _____ that are _____

Distribution of the Population of the Top 50 Cities in the US



To make a stemplot:

1. Separate each observation into a stem, consisting of all but the final (rightmost) digit, and a leaf, the final digit. Stems may have as many digits as needed, but each leaf contains only a single digit.
2. Write the stems in a vertical column with the smallest at the top, and draw a vertical line at the right of this column.
3. Write each leaf in the row to the right of its stem, in increasing order out from the stem.

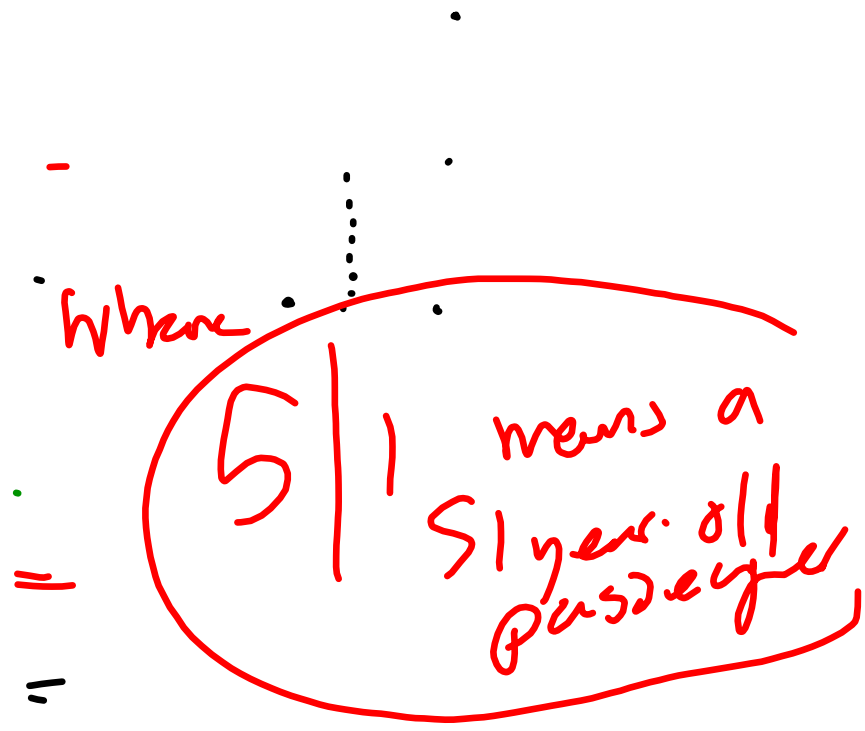
- 1) Figure out your handle, stem, usually one digit FROM the left.
- 2) Write down all the handles, stems. Short numbers get 0 handles.
- 3) Go one digit to the right of the handles, stems. These are your leaves. They should be rounded.
- 4) Write the leaves on the row of their stem.
 - In order
 - Lined up in columns
- 5) Write a legend, identifying stem and leaf.

Age of Passenger

0	17
1	13788
2	11
3	35
4	259
5	13489
6	569
7	0

Age of passengers

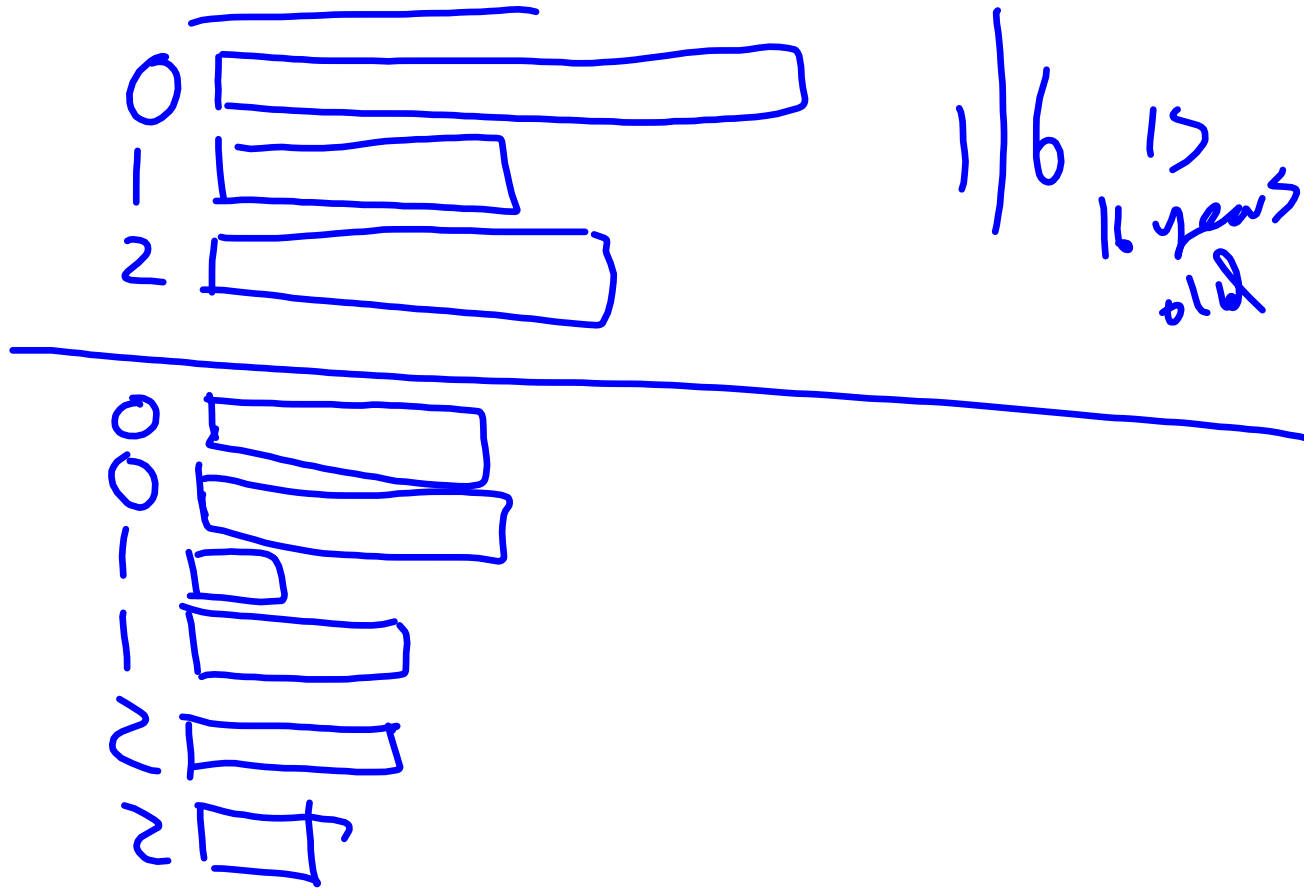
A	69
B	18
C	7
D	18
E	21
F	59
G	11
H	38
I	66
J	42
K	49
L	70
M	54
N	13
O	1
P	53
Q	21
R	58
S	17
T	35
U	65
V	51
W	45



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W

20
18
3
13
4
8
20
5
16
21
2
4
14
19
8
28
29
23
27
0
15
9
7

Age of Passengers



Lake District	978	metres
Pennines	893	metres
Cheviot Hills	815	metres
Black Mountains (within England)	703	metres
Peak District	636	metres
Dartmoor	621	metres
Shropshire Hills	540	metres
Exmoor	519	metres
Malvern Hills	425	metres
North York Moors	424	metres
Bodmin Moor	420	metres
Quantock Hills	384	metres
Cotswolds	330	metres
Mendip Hills	325	metres
Salisbury Plain	297	metres
Greensand Ridge	294	metres
South Downs	270	metres
North Downs	268	metres
Chilterns	267	metres
Yorkshire Wolds	246	metres
Lincolnshire Wolds	168	metres

9.8
 8.9
 8.2
 7
 6.4
 6.2
 5.4
 5.2
 4.3
 4.2
 4.2
 3.8
 3.3
 3.3
 3.3
 3.0
 2.9
 2.7
 2.7
 2.7
 2.5
 1.7

1 | 7
 2 | 5 7 7 7
 3 | 0 3 3 8
 4 | 2 2 3
 5 | 2 4
 6 | 2 4
 7 | 0
 8 | 2 9
 9 | 8

Height of
 bumps
 on the
 British
 Isles

4/2
 420
 metres

Diseases of heart	597,689
Malignant neoplasms	574,743
Chronic lower respiratory diseases	138,080
Cerebrovascular diseases	129,476
Accidents (unintentional injuries)	120,859
Alzheimer's disease	83,494
Diabetes mellitus	69,071
Nephritis, nephrotic syndrome and nephrosis	50,476
Influenza and pneumonia	50,097
Intentional self-harm (suicide)	38,364
Septicemia	34,812
Chronic liver disease and cirrhosis	31,903
Essential hypertension and hypertensive renal disease	26,634
Parkinson's disease	22,032
Pneumonitis due to solids and liquids	17,011
All Other	483,694

South American nations by Population

Brazil	201,033,000
Colombia	47,130,000
Argentina	41,350,000
Peru	30,476,000
Venezuela	29,760,000
Chile	16,841,000
Ecuador	15,779,000
Bolivia	10,517,000
Paraguay	6,849,000
Uruguay	3,297,000
Guyana	798,000
Suriname	539,000
French Guiana	259,000
Falkland Islands	3,000
Total	399,230,000

```

0 | 0 0 1 1 3 7
1 | 1 6 7
2 |
3 | 0 0
4 | 1 7

```

high : 2.01033E8

Key : 3|1 means 31000000