

Histograms

Frequency table - table that shows the frequency of data value in same size intervals

Ex: Shoe sizes

4, 4.5, 5, 5, 6, 6.5, 7, 7, 7, 8, 9, 5, 10

top row what data is about (here is shoe sizes)

bottom row frequency

*decide intervals usually like 4-5 intervals

Shoe size	4-6	6-8	8-10	10-12
frequency	4	5	2	1

* include value on left & not right

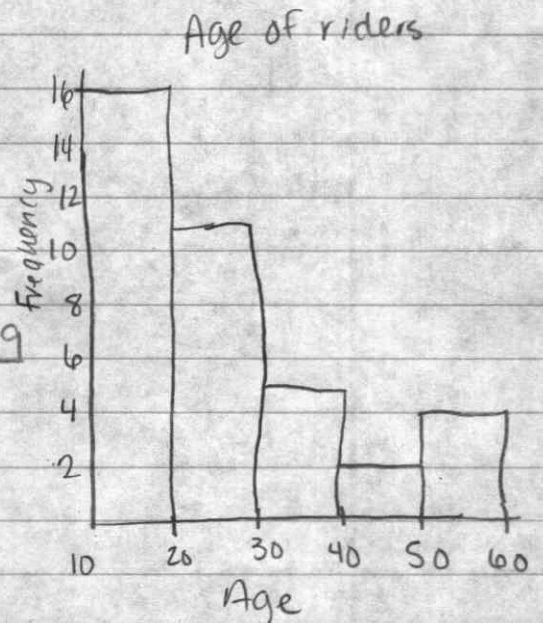
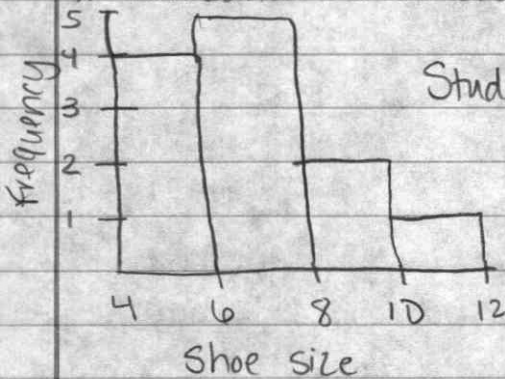
add frequencies to make sure you did not miss one

$4 + 5 + 2 + 1 = 12$ 12 values ✓ we are good

To draw histogram

y-vertical = frequency

x-horizontal = shoe size *use same intervals from table

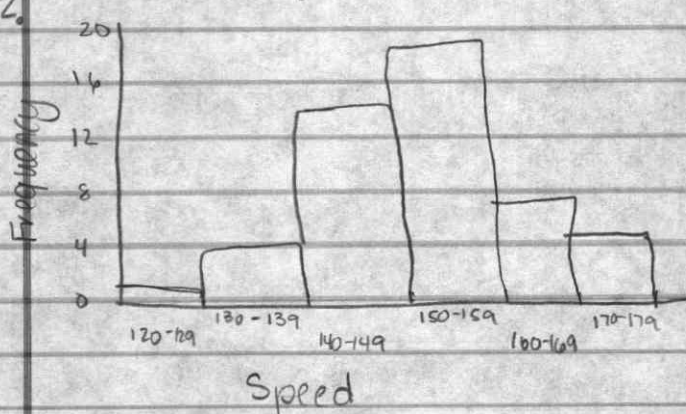


You Try

Age	10-19	20-29	30-39	40-49	50-59
frequency	16	11	5	2	4

Ex 2.

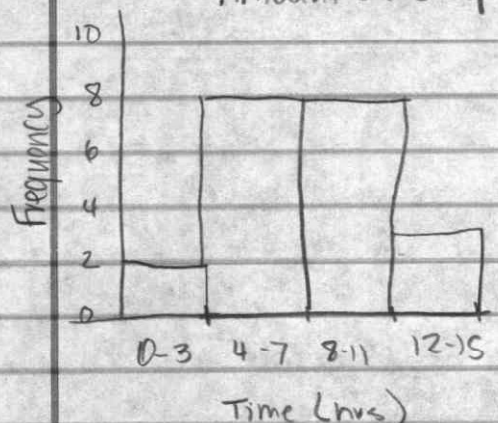
Daytona 500 winning speeds



- A) which contains most \rightarrow highest bar $150-159$ mph
- B) Less than 140 mph $\rightarrow 120-129 = 1$ $130-139 = 4$ $1+4 = 5$ total
- C) at least 160 mph $\rightarrow 160-169 = 8$ $170-179 = 5$ $8+5 = 13$ total

You try

Amount of sleep



- A) at least 8 hours $8-11 = 8$ $12-15 = 3$ $8+3 = 11$ stud
- B) less than 12 $0-3 = 2$ $4-7 = 8$ $8-11 = 8$ $2+8+8 = 18$ students

Ex 3: Skewed = look for the tail (few data pts)



skewed left
* tail on left



Symmetric
* same on both side



Skewed right
* tail on right



Uni form
* basically flat

You try



skewed left * tail is on left