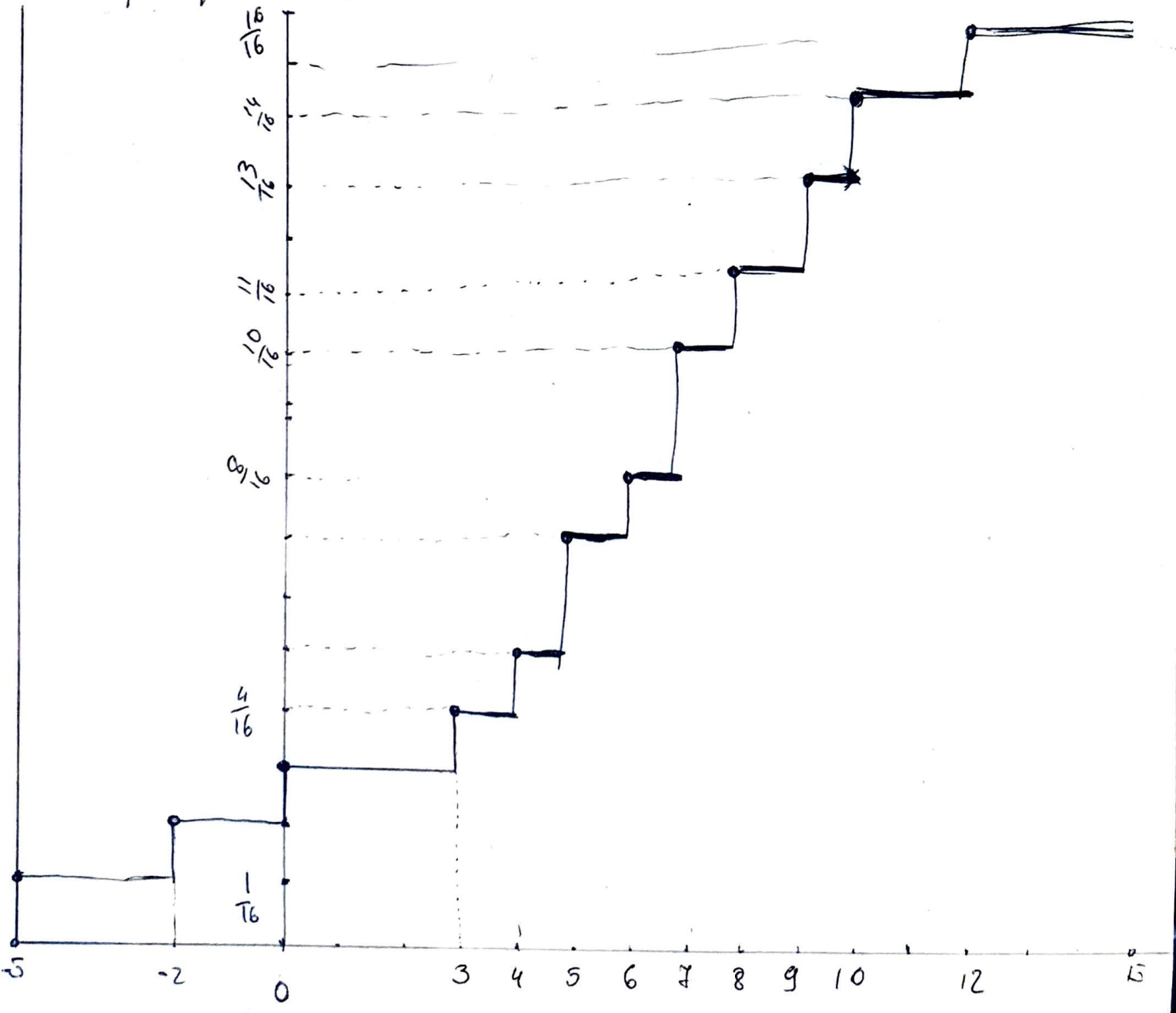
DataViz

Homework 2

D.A.

Part 2.

	-5:1	-2:1	0:1	3:1	4:1	5:2	6:1	7:2	8:1	9:2	10:1	12:1	15:1
fr	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{2}{16}$	$\frac{1}{16}$	$\frac{2}{16}$	$\frac{1}{16}$	$\frac{2}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$
ecdf	$\frac{1}{16}$	$\frac{2}{16}$	$\frac{3}{16}$	$\frac{4}{16}$	$\frac{5}{16}$	$\frac{7}{16}$	$\frac{8}{16}$	$\frac{10}{16}$	$\frac{11}{16}$	$\frac{13}{16}$	$\frac{14}{16}$	$\frac{15}{16}$	$\frac{16}{16}$



b) Boxplot

min = -5

max = 35

n = 19 => Q_2 = middle value = 20

Q_1 = middle number in rang [-5; 20), which is 15]

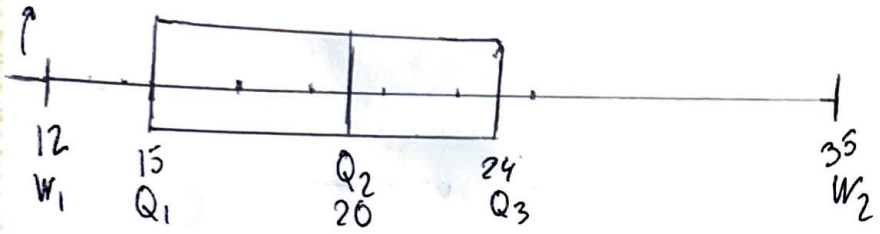
Q_3 = middle value in range [21; 35], which is 24]

IQR = 24 - 15 = 9

$min_{W_1} = Q_1 - 1{,}5 \cdot IQR = 15 - 13{,}5 = 1{,}5$ $\quad W_1 = 12$ | Outliner: -5

$max_{W_2} = Q_3 + 1{,}5 \cdot IQR = 24 + 13{,}5 = 37{,}5$ $\quad W_2 = 35$

0-5 is here



c)

		freq
Bin 1	[-10; 65]	8
Bin 2	[65; 85]	8
Bin 3	[85; 92]	4
Bin 4	[92; 97]	2
Bin 5	[97; 105]	3