

V. iii. Cont.

Eg. Construct a boxplot for the following cookie chips datas:

19	19	20	20	20	20	22	22	22	22
23	23	23	23	23	23	23	24	24	24
24	24	25	25	25	25	25	25	25	26
26	26	26	26	26	27	27	28	28	30

Min

20th

30th

Max

40 total

S: $n = 40$

$L_{25} = 0.25 \cdot 40 = 10$

$Q_1 = 22$

$L_{50} = 0.50 \cdot 40 = 20$

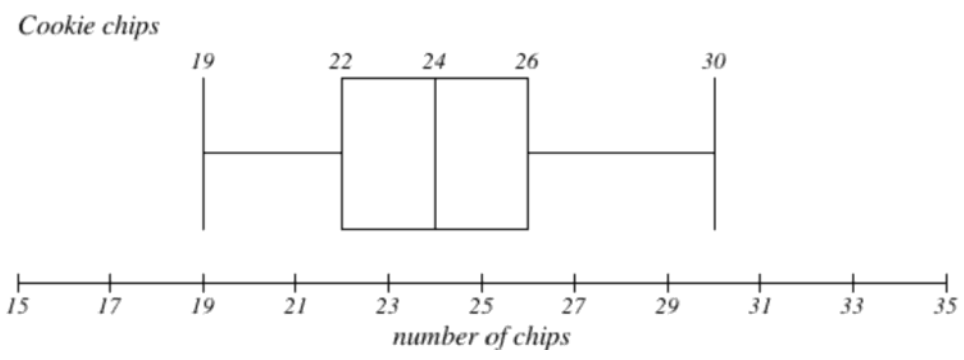
$Q_2 = 24$

$L_{75} = 0.75 \cdot 40 = 30$

$Q_3 = 26$

Min = 19, $Q_1 = 22$, $Q_2 = 24$, $Q_3 = 26$, Max = 30

<https://www.imathas.com/stattools/boxplot.html>



← for homework and by finding the 5-number summary

(TI-84): Stat → EDIT → 'input a 1.' → ...

TI-84: Stat → EDIT → 'input each data' → quit

Stat → CALC → 1:1-Var Stats

L1	L2	L3	L4	L5	1
26					
26					
26					
26					
27					
27					
28					
28					
30					

L1(40)=

1-Var Stats
List:L1
FrcList:
Calculate

1-Var Stats
 \uparrow Sx=2.580158905
 σ x=2.546865137
 n=39
 minX=19
 Q1=22
 Med=24
 Q3=26
 maxX=30

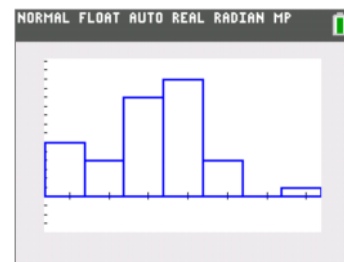
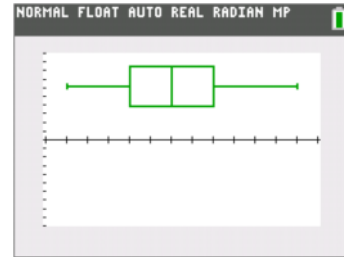
Histogram, Boxplot and others:

(blue)
Statplot → 'plot on' the icon → graph → Zoom → 9: ZoomStat

L1	L2	L3	L4	L5	1
26					
26					
26					
26					
27					
27					
28					
28					
30					

L1(40)=

Plot1 Plot2 Plot3
 On Off
 Type:
 Xlist:L1
 Freq: 1
 Color: GREEN



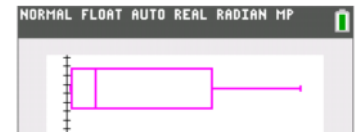
(automated)

eg Graph a box-and-whisker plot for the data values shown.
 10; 10; 10; 15; 35; 75; 90; 95; 100; 175; 420; 490; 515; 515; 790

S:

L1	L2	L3	L4	L5	2
19	10				
19	10				
20	10				
20	15				
20	35				

Plot1 Plot2 Plot3
 On Off
 Type:
 Xlist:L2



L1	L2	L3	L4	L5	2
19	10				
19	10				
20	10				
20	15				
20	35				
20	75				
22	90				
22	95				
22	100				
22	175				
23	420				

L2(1)=10



```

Plot1 Plot2 Plot3
On Off
Type: [Type] [Type] [Type] [Type] [Type] [Type]
Xlist:L2
Freq:1
Color: MAGENTA

```

