

6.5 A household appliance service and repair company received the following numbers of orders for service and repair daily during eight weeks of six working days each. Construct a histogram using 7 classes.

15	19	22	24	25	26	28	30
16	20	22	24	25	26	28	30
18	21	22	24	25	26	28	31
18	21	22	24	25	26	28	31
18	22	23	24	25	27	29	32
19	22	23	25	25	27	29	34

Step 1: Find the Range: Range = Max - Min     $34-15 = \boxed{19}$

Step 2: Decide on number of classes  $\boxed{7}$

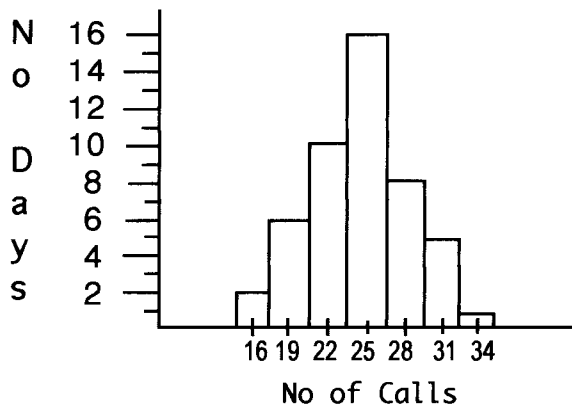
Step 3: Find class width: Round Up (Range / No Classes)  
 Round Up ( $19 / 7$ )  $\boxed{3}$     <--- Xscl

Step 4: Selecting a starting point  $\boxed{15}$     <---Xmin

Step 5: Finish the table

Boundaries		Limits		Class		
Lower	Upper	Lower	Upper	Mark	Frequency	
14.5	17.5	15	17	16	2	
17.5	20.5	18	20	19	6	
20.5	23.5	21	23	22	10	
23.5	26.5	24	26	25	16	<--- Ymax
26.5	29.5	27	29	28	8	
29.5	32.5	30	32	31	5	
32.5	35.5	33	35	34	1	

Draw the Histogram



On TI-83  
 WINDOW  
 Xmin= $\boxed{15}$   
 Xmax=38  
 Xscl= $\boxed{3}$   
 Ymin=0  
 Ymax= $\boxed{16}$   
 Yscl=1  
 Xres=1

STUDY: Chapter 2:  
 Section 2.2 & 2.3 • Frequency Tables & Histograms