

STEPS TO DOWNLOAD MINITAB

STEP 01: <http://www.minitab.com/en-us/products/minitab/free-trial/>

STEP 02: FILL REQUIRED DETAILS IN THE FORM & CLICK “REQUEST YOUR FREE TRIAL”



The screenshot shows the Minitab 18 registration page. It has a blue header with the Minitab logo and the text 'Start Your Free 30-Day Trial'. Below the header is a form with two sections: 'Personal Information' and 'Organizational Information'. The 'Personal Information' section includes fields for 'First Name', 'Last Name', 'Email', and 'Phone', and a dropdown menu for 'which best describes you?'. The 'Organizational Information' section includes a field for 'Organization'. At the bottom of the form is a blue button labeled 'Download the Trial'.

STEP 03: ON “START YOUR FREE 30-DAY TRIAL” PAGE - CLICK “DOWNLOAD THE TRIAL”



STEP 04: ON THE NEW POP UP “OPENING MINITAB18.1.0.0SETUP.EXE”, CLICK “SAVE FILE”



STEP 05: DOUBLE-CLICK ON THE DOWNLOADED .EXE FILE & INSTALL MINITAB

STEPS TO MEAN, MEDIAN, MODE & STANDARD DEVIATION ON MINITAB

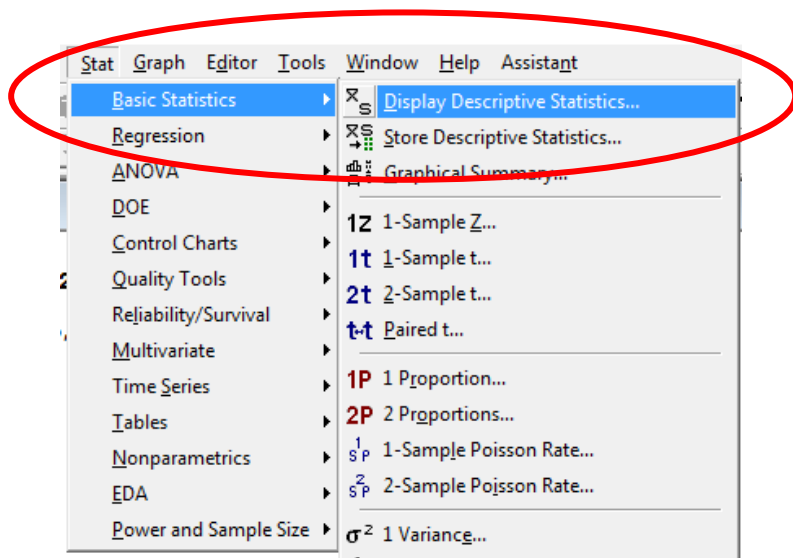


DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

STEP 01: PASTE DATA IN COLUMN C1 OF THE WORKSHEET

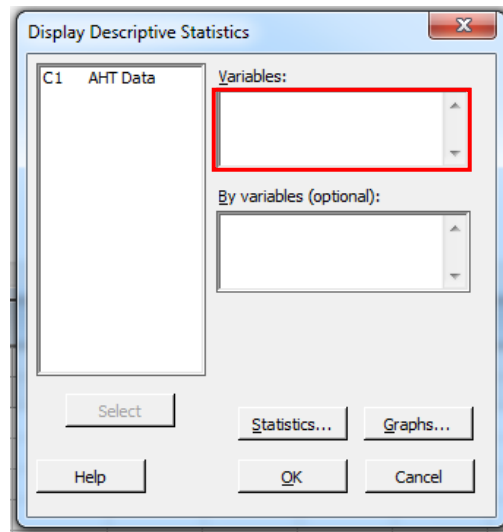
	C1	C2
	AHT Data	
1	165	
2	199	
3	222	
4	202	
5	149	
6	174	
7	204	
8	205	
9	196	

STEP 02: CLICK STAT -> BASIC STATISTICS -> DISPLAY DESCRIPTIVE STATISTICS

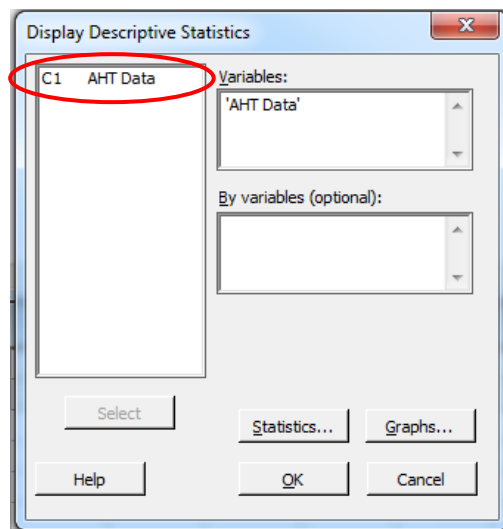


STEP 03: IN DISPLAY DESCRIPTIVE STATISTICS WINDOW, OBSERVE IF THE CURSOR IS BLINKING INSIDE THE “VARIABLES” BOX

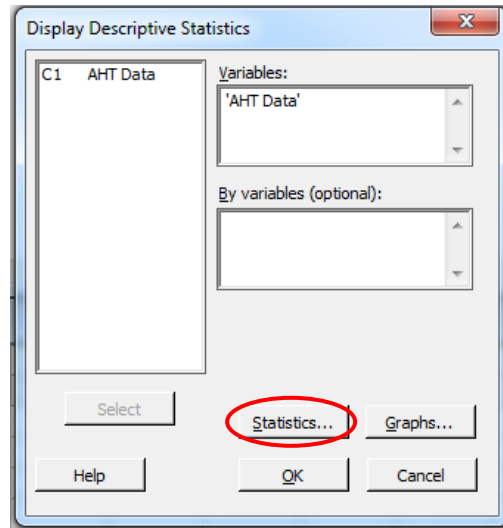
- **IF THE CURSOR IS BLINKING INSIDE THE BOX, GO TO STEP 04**
- **IF THE CURSOR IS NOT BLINKING INSIDE THE BOX, CLICK INSIDE THE BOX SO THAT THE CURSOR STARTS BLINKING THERE, THEN GO TO STEP 04**



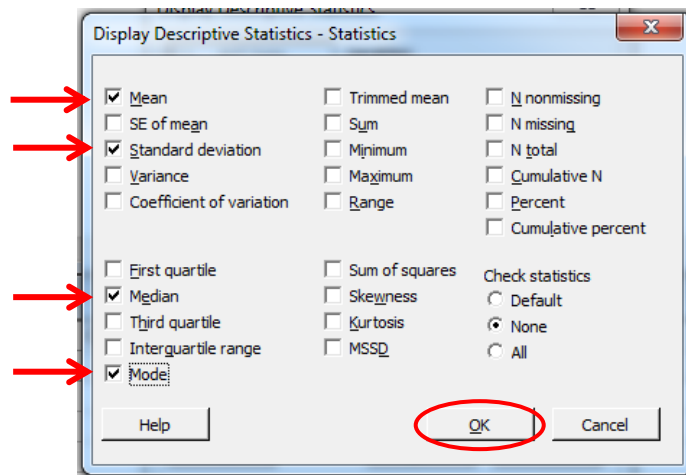
STEP 04: DOUBLE-CLICK ON “C1 AHT DATA”. AS YOU DO THIS STEP, YOU WILL OBSERVE THAT THE VARIABLES BOX IS UPDATED WITH “AHT DATA” AS SHOWN IN THE SCREENSHOT BELOW:



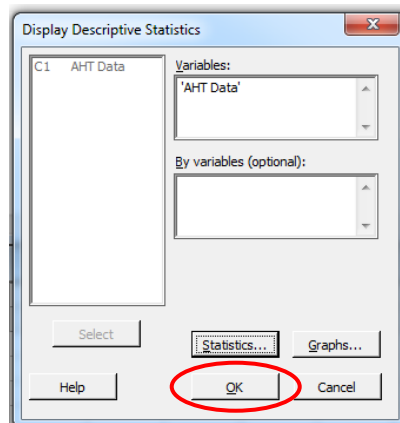
STEP 04: CLICK ON THE “STATISTICS” BUTTON, A NEW WINDOW WILL POP-UP CALLED “DISPLAY DESCRIPTIVE STATISTICS – STATISTICS”



STEP 05: IN THE “DISPLAY DESCRIPTIVE STATISTICS – STATISTICS WINDOW”, ENSURE THAT ONLY MEAN, STANDARD DEVIATION, MEDIAN & MODE ARE CHECKED. UNCHECK EVERYTHING ELSE. THEN CLICK OK.

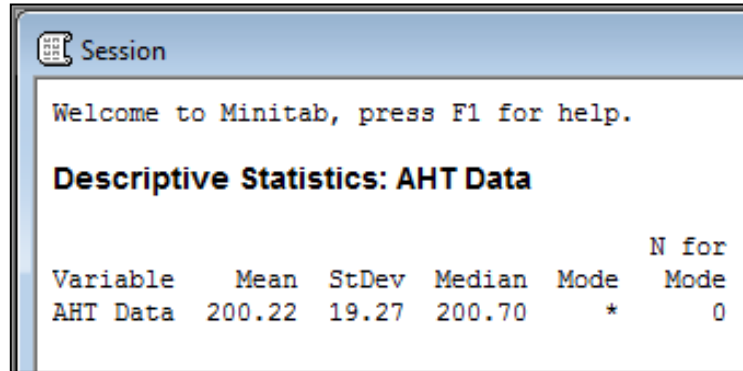


STEP 06: IN THE “DISPLAY DESCRIPTIVE STATISTICS” WINDOW, CLICK OK



STEP 07: YOU WILL RECEIVE THE FOLLOWING OUTPUT IN THE SESSION WINDOW:

- **MEAN = 200.22**
- **STANDARD DEVIATION = 19.27**
- **MEDIAN = 200..70**
- **MODE = *** (I.E. THERE IS NO MODE IN THIS DATA)



The image shows a screenshot of the Minitab Session window. The window has a blue header bar with the text 'Session' and a small icon. Below the header, the text 'Welcome to Minitab, press F1 for help.' is displayed. The main content area is titled 'Descriptive Statistics: AHT Data'. Below the title, there is a table with the following data:

Variable	Mean	StDev	Median	Mode	N for Mode
AHT Data	200.22	19.27	200.70	*	0

STEPS TO PERFORM RUN CHART ON MINITAB

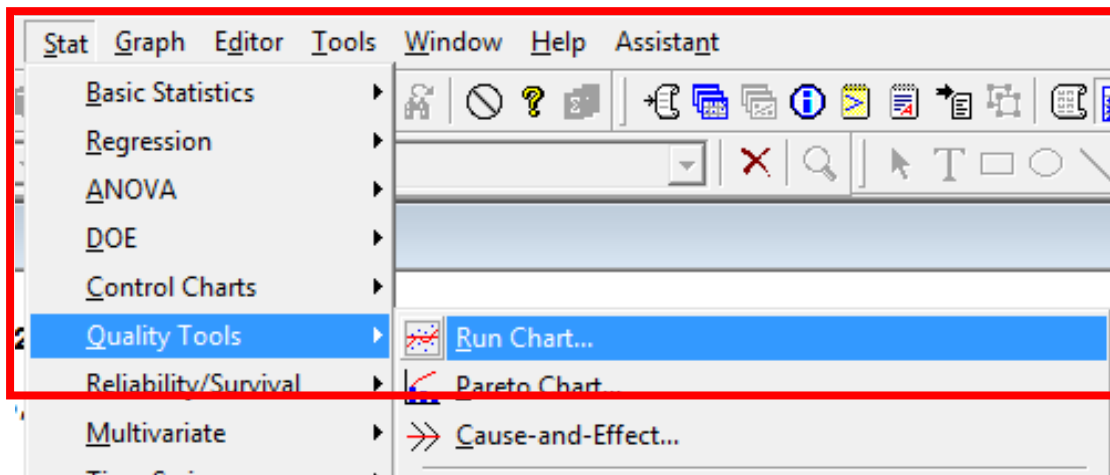


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STEP 01: PASTE DATA IN COLUMN C1 OF THE WORKSHEET

	C1-T	C2-D	C3	C4
	Day	Date	No. of Employees Arriving Late	
1	Mon	01/Nov	175	
2	Tue	02/Nov	180	
3	Wed	03/Nov	185	
4	Thu	04/Nov	170	
5	Fri	05/Nov	157	
6	Mon	08/Nov	174	
7	Tue	09/Nov	158	
8	Wed	10/Nov	160	
9	Thu	11/Nov	189	

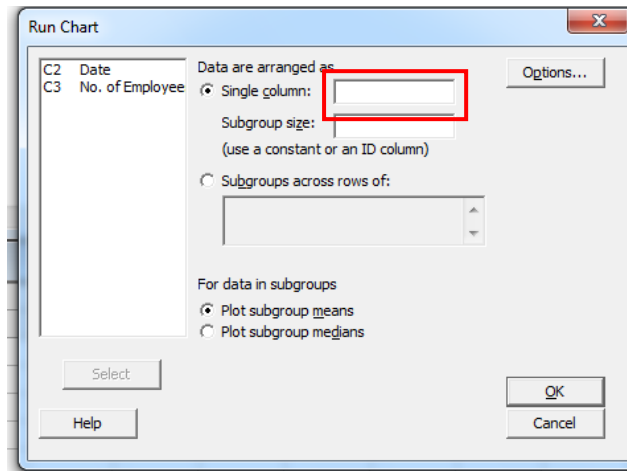
STEP 02: CLICK STAT -> QUALITY TOOLS -> RUN CHART



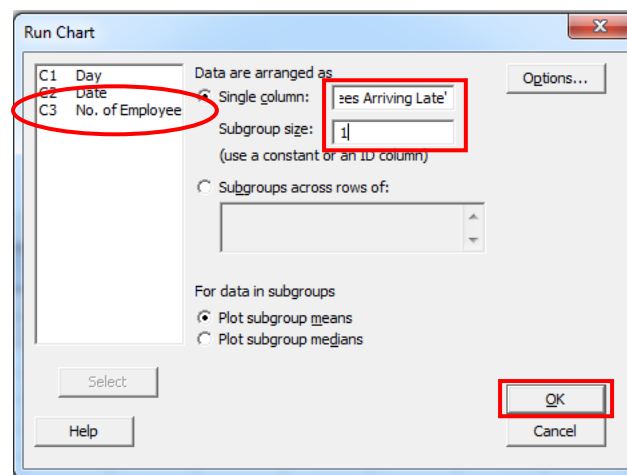
A NEW WINDOW "RUN CHART" WILL POP-UP

STEP 03: OBSERVE IF THE CURSOR IS BLINKING INSIDE THE “SINGLE COLUMN” BOX

- IF THE CURSOR IS BLINKING INSIDE THE BOX, GO TO STEP 04
- IF THE CURSOR IS NOT BLINKING INSIDE THE BOX, CLICK INSIDE THE BOX SO THAT THE CURSOR STARTS BLINKING THERE, THEN GO TO STEP 04



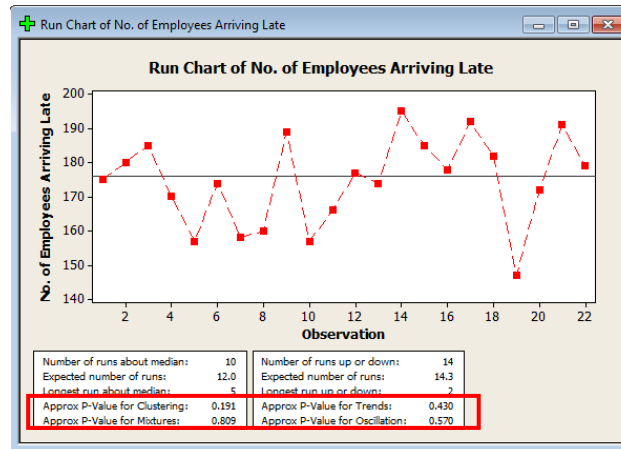
STEP 04: DOUBLE-CLICK ON “NO. OF EMPLOYEES ARRIVING LATE”. AS YOU DO THIS STEP, YOU WILL OBSERVE THAT THE SINGLE COLUMN BOX IS UPDATED WITH “NO. OF EMPLOYEES ARRIVING LATE” AS SHOWN IN THE SCREENSHOT BELOW:



STEP 05: UPDATE “1” IN THE SUBGROUP SIZE BOX

STEP 06: CLICK OK

STEP 07: THE GRAPH OF RUN CHART APPEARS. OBSERVE THE P-VALUE. IF P-VALUE FOR CLUSTERING, MIXTURES, TRENDS & OSCILLATIONS IS GREATER THAN 0.05, THE DATA IS STABLE



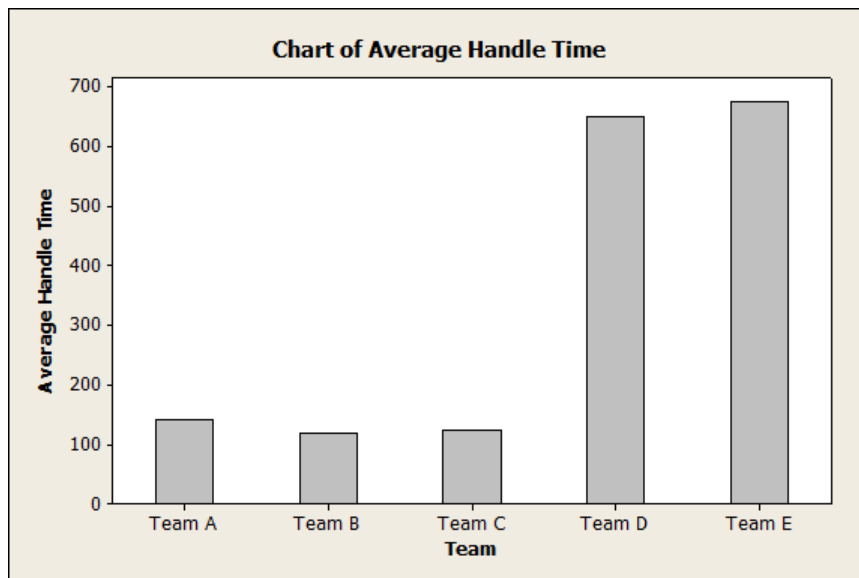
STEPS TO CREATE BAR CHART ON MINITAB



DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

1. Open the Excel Sheet "Data – Bar Chart and Pie Chart.xlsx".
2. Copy data from the excel sheet to the Minitab worksheet.
3. Choose **Graph > Bar Chart**.
4. From **Bars Represent**, choose **Values from a table**.
5. Under **One column of values**, choose **Simple**. Click **OK**.
6. In **Graph variables**, enter *Average Handle Time*.
7. In **Categorical variables**, enter *Team*. Click **OK**.

Graph window output



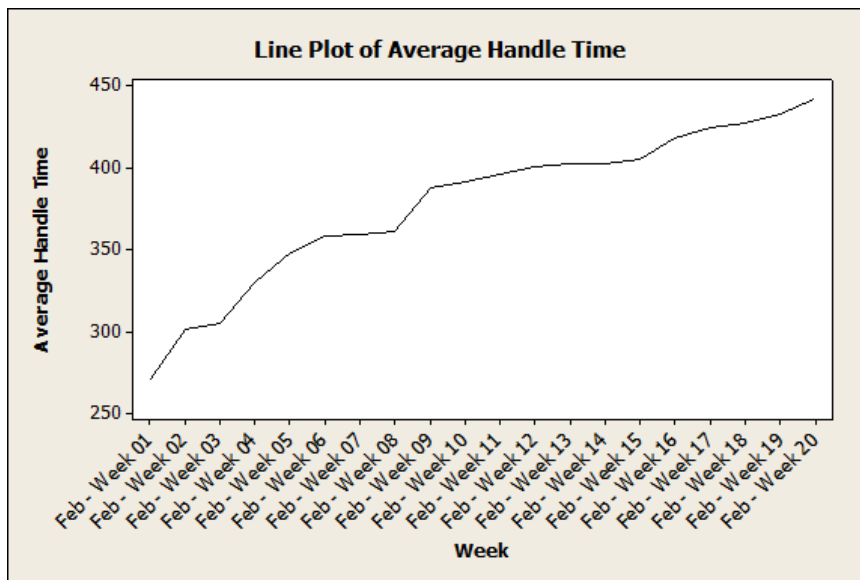
STEPS TO CREATE LINE CHART ON MINITAB



DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

1. Open the Excel Sheet "Data - Line Chart.xlsx".
2. Copy data from the excel sheet to the Minitab worksheet.
3. Choose **Graphs > Line Plot > Without Symbols, Series in Rows or Columns > OK**.
4. In **Graph variables**, enter *Average Handle Time*.
5. In **Label column**, enter *Week*.
6. Under **Series Arrangement**, choose **Each column forms a series**. Click **OK**.

Graph window output



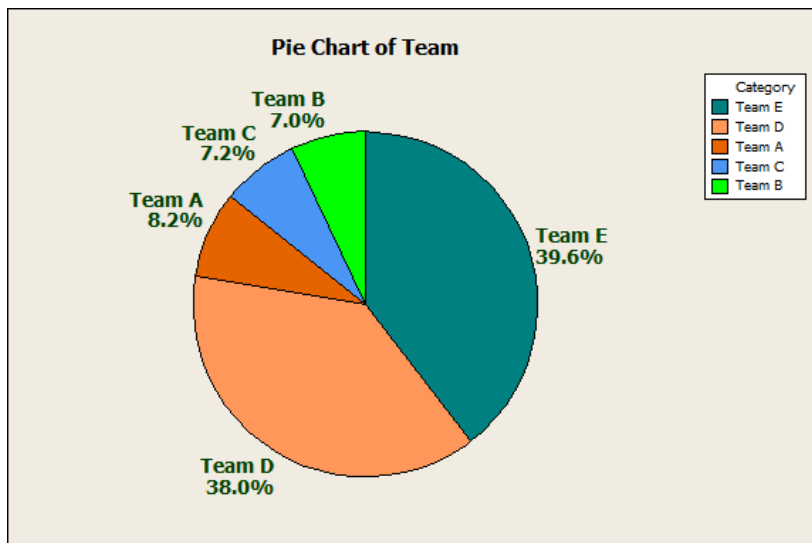
STEPS TO CREATE PIE CHART ON MINITAB



DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

1. Open the Excel Sheet "Data - Line Chart.xlsx".
2. Copy & paste data from Excel to Minitab.
3. Choose **Graph > Pie Chart**.
4. Choose **Chart values from a table**.
5. In **Categorical variable**, enter *Team*. In **Summary variables**, enter *Average Handle Time*.
6. Click **Pie Chart Options**. Under **Order slices by**, choose **Decreasing volume**. Click **OK**.
7. Click **Labels**. Click the **Slice Labels** tab.
8. Under **Label pie slices with**, check **Category Name** and **Percent**.
9. Click **OK** in each dialog box.

Graph window output



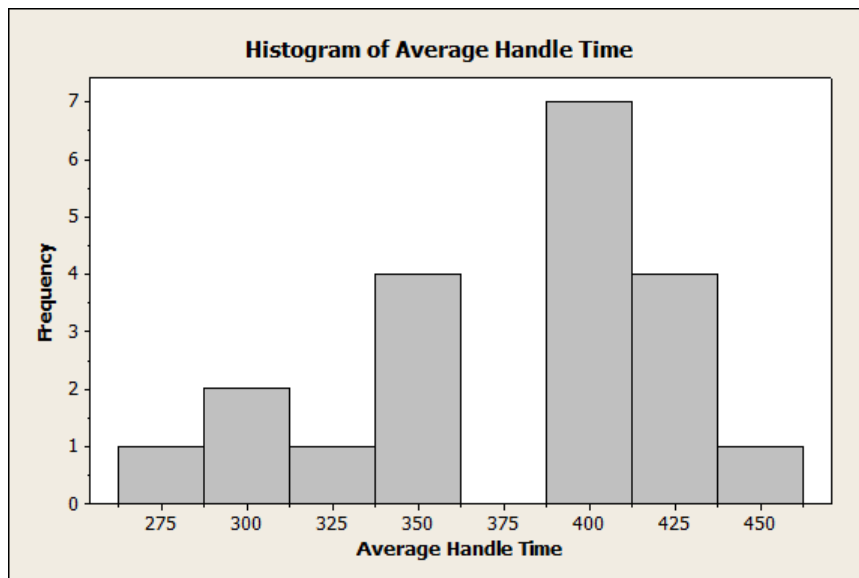
STEPS TO CREATE HISTOGRAM ON MINITAB



DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

1. Open the Excel Sheet "Data - Histogram.xlsx".
2. Choose **Graph > Histogram**.
3. Choose **Simple**, then click **OK**.
4. In **Graph variables**, enter *Average Handle Time*.
5. Click **Scale**.
6. Under **Y Scale Low** and **X Scale Low**, check **Minor ticks**.
7. Click **OK** in each dialog box.

Graph window output



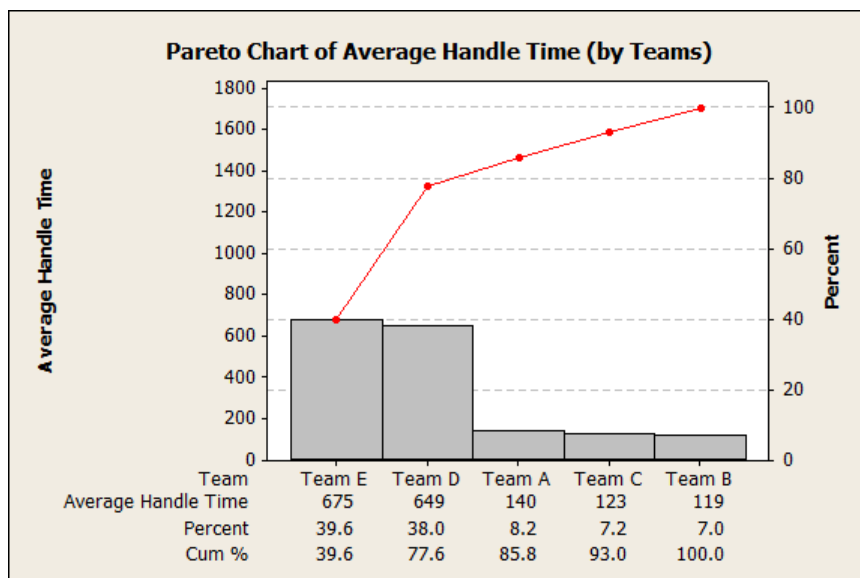
STEPS TO CREATE PARETO CHART ON MINITAB



DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

1. Open the Excel Sheet "Data - Pareto Chart.xlsx".
2. Copy data from the excel sheet to the Minitab worksheet.
3. Choose **Stat > Quality Tools > Pareto Chart**.
4. In **Defects or attribute data in**, enter *Team*. In **Frequencies in**, enter *Average Handle Time*.
5. Click **OK**.

Graph window output



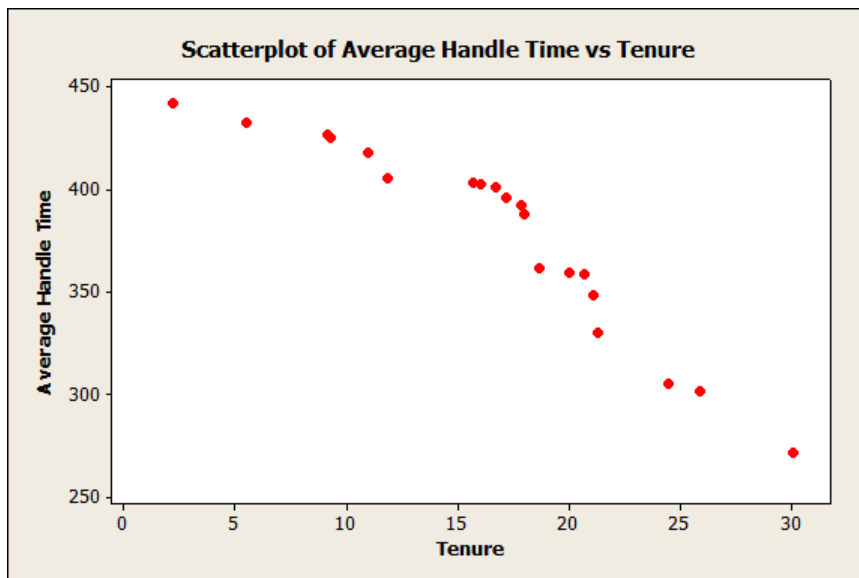
STEPS TO CREATE SCATTERPLOT ON MINITAB



DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

1. Open the Excel Sheet "Data - Scatterplot and Correlation Analysis.xlsx".
2. Copy data from the excel sheet to the Minitab worksheet.
3. Choose **Graph > Scatterplot**.
4. Choose **Simple**, then click **OK**.
5. Under **Y variables**, enter *Average Handle Time*. Under **X variables**, enter *Tenure*.
6. Click **OK**.

Graph window output



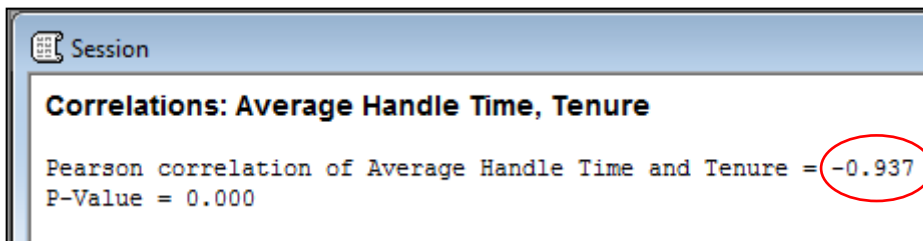
STEPS TO PERFORM CORRELATION ANALYSIS ON MINITAB



DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

1. Open the Excel Sheet "Data - Scatterplot and Correlation Analysis.xlsx".
2. Copy data from the excel sheet to the Minitab worksheet.
3. Choose **Stat > Basic Statistics > Correlation**.
4. In **Variables**, enter *Average Handle Time Tenure*. Click **OK**.

Session window output



STEPS TO CREATE CONTROL CHART (C CHART) ON MINITAB



DISCLAIMER: SOME STEPS MAY SLIGHTLY DIFFER BASED ON YOUR MINITAB VERSION

1. Open the Excel Sheet "Control Chart Data_No. of Errors".
2. Copy data from the excel sheet to the Minitab worksheet.
3. Choose **Stat > Control Charts > Attributes Charts > C**.
4. In **Variables**, enter *No. of Errors* then click **OK**.

Graph window output

