

MSA A.A.A. Kappa-test in Minitab

Stap 1: open Minitab

The screenshot displays the Minitab software interface. At the top is the menu bar with options: File, Edit, Data, Calc, Stat, Graph, Editor, Tools, Window, Help, and Assistant. Below the menu bar is a toolbar with various icons for file operations, editing, and data analysis. The main workspace is divided into two panes. The top pane, titled 'Session', shows a timestamp '8-6-2017 15:56:49' and a welcome message: 'Welcome to Minitab, press F1 for help.' The bottom pane, titled 'Worksheet 1 ***', displays a grid with 16 columns (C1 to C16) and 5 rows (1 to 5). The first cell (C1, 1) is selected. The status bar at the bottom indicates 'Current Worksheet: Worksheet 1'. The Windows taskbar is visible at the very bottom, showing various application icons and the system clock.

Minitab - Untitled

File Edit Data Calc Stat Graph Editor Tools Window Help Assistant

8-6-2017 15:56:49

Welcome to Minitab, press F1 for help.

Worksheet 1 ***

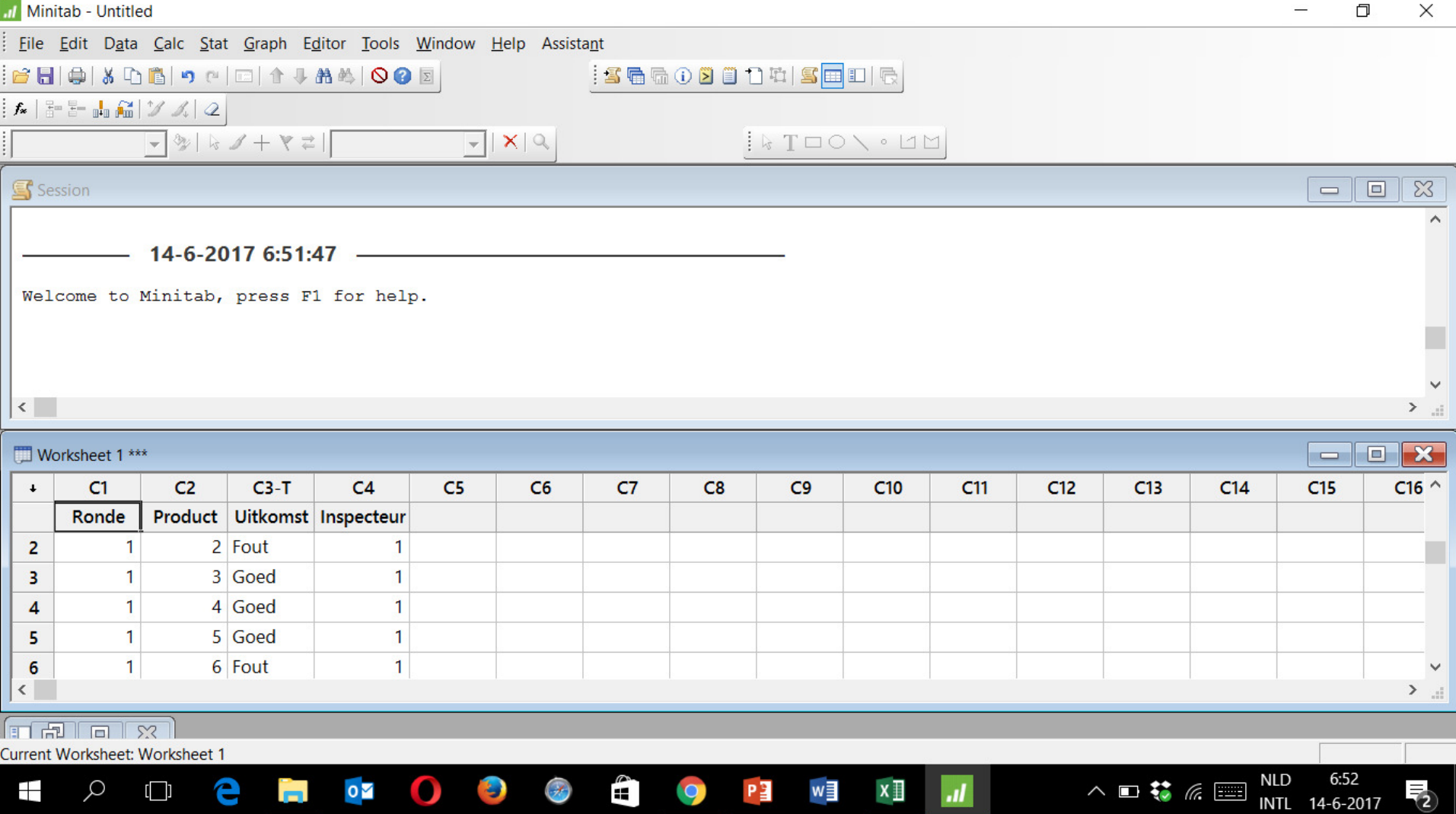
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
1																
2																
3																
4																
5																

Current Worksheet: Worksheet 1

NLD INTL 15:57 8-6-2017

MSA A.A.A. Kappa-test in Minitab

Stap 2: kopieer en plak de data uit excel



The screenshot displays the Minitab software interface. At the top is the menu bar with options: File, Edit, Data, Calc, Stat, Graph, Editor, Tools, Window, Help, Assistant. Below the menu bar is a toolbar with various icons for file operations, editing, and data analysis. The main window is divided into two panes. The top pane, titled 'Session', shows the date and time '14-6-2017 6:51:47' and a welcome message: 'Welcome to Minitab, press F1 for help.' The bottom pane, titled 'Worksheet 1 ***', displays a data table with 16 columns (C1 to C16) and 6 rows of data. The first four columns are labeled 'Ronde', 'Product', 'Uitkomst', and 'Inspecteur' respectively. The data in the table is as follows:

	C1	C2	C3-T	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
	Ronde	Product	Uitkomst	Inspecteur												
2	1	2	Fout	1												
3	1	3	Goed	1												
4	1	4	Goed	1												
5	1	5	Goed	1												
6	1	6	Fout	1												

At the bottom of the screen is the Windows taskbar, showing various application icons and the system clock indicating the date and time as 14-6-2017 6:52.

MSA A.A.A. Kappa-test in Minitab

Stap 3: ga naar A.A.A.

The screenshot shows the Minitab software interface. The 'Stat' menu is open, and the path 'Quality Tools' > 'Attribute Agreement Analysis...' is highlighted. A tooltip for 'Attribute Agreement Analysis' is visible, stating: 'Evaluate the consistency and accuracy of subjective ratings that are made by multiple appraisers.'

Worksheet 1 ***

	C1	C2	C3-T	C4
	Ronde	Product	Uitkomst	Inspecteur
2	1	2	Fout	1
3	1	3	Goed	1
4	1	4	Goed	1
5	1	5	Goed	1
6	1	6	Fout	1

Current Worksheet: Worksheet 1

Windows taskbar at the bottom shows the time as 6:55 on 14-6-2017, with system status 'NLD INTL'.

MSA A.A.A. Kappa-test in Minitab

Stap 4: vul gegevens in

Attribute Agreement Analysis

C1	Ronde
C2	Product
C3	Uitkomst
C4	Inspecteur

Data are arranged as

☒ Attribute column:

Samples: **Uitkomst**

Appraisers: **Product**

☐ Multiple columns:

(Enter trials for each appraiser together)

Number of appraisers:

Number of trials:

Appraiser names (optional):

Known standard/attribute: (Optional)

☐ Categories of the attribute data are ordered

Select

Help

Information...

Options...

Graphs...

Results...

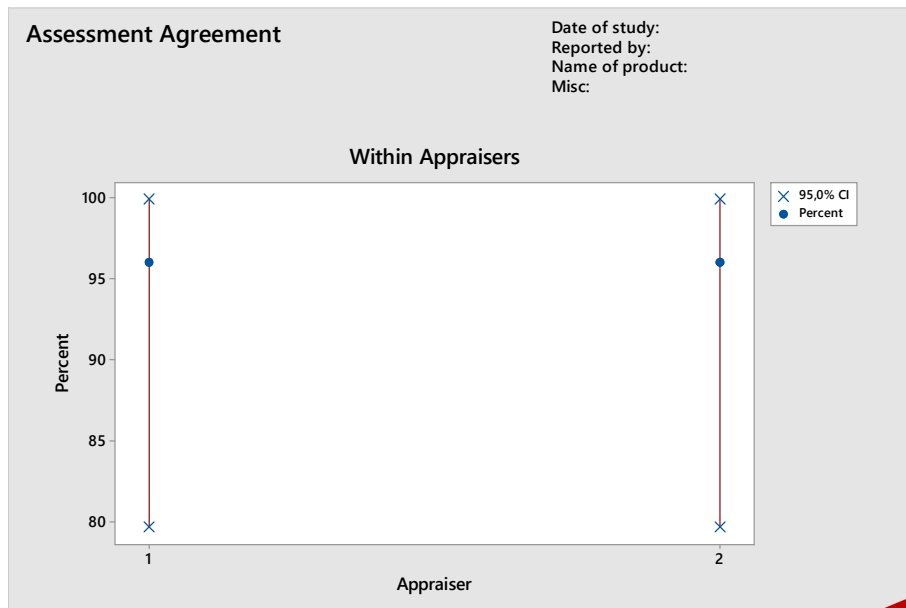
OK

Cancel



MSA A.A.A. Kappa-test in Minitab

Stap 5: bekijk de uitkomsten: de herhaalbaarheid is naar verwachting 96% bij elke beoordelaar. Het betrouwbaarheidsinterval is tussen 80% en 100% met een betrouwbaarheidsniveau van 95%.



Attribute Agreement Analysis for Uitkomst Within Appraisers

Assessment Agreement

Appraiser	# Inspected	# Matched	Percent	95% CI
1	25	24	96,00	(79,65; 99,90)
2	25	24	96,00	(79,65; 99,90)

Matched: Appraiser agrees with him/herself across trials.

Fleiss' Kappa Statistics

Appraiser	Response	Kappa	SE Kappa	Z	P(vs > 0)
1	Fout	0,937291	0,115470	8,11718	0,0000
	Goed	0,937291	0,115470	8,11718	0,0000
2	Fout	0,935678	0,115470	8,10321	0,0000
	Goed	0,935678	0,115470	8,10321	0,0000

Between Appraisers

Assessment Agreement

# Inspected	# Matched	Percent	95% CI
25	21	84,00	(63,92; 95,46)

Matched: All appraisers' assessments agree with each other.

Fleiss' Kappa Statistics

Response	Kappa	SE Kappa	Z	P(vs > 0)
Fout	0,803175	0,0516398	15,5534	0,0000
Goed	0,803175	0,0516398	15,5534	0,0000

de herhaalbaarheid is beter dan de reproduceerbaarheid, maar beide zijn ok.

