called centering the 4-year moving averages. The process continues until the end of the series to get 4-years moving averages centered. The moving averages of some proper period smooth out the short term fluctuations and the trend is measured by the moving averages.

Example: Compute 5-year, 7-year and 9-year moving averages for the following data.

Years	1990	1991	1992	1993	1994	1995	1996	19997	1998	1999	2000
Values	2	4	6	8	10	12	14	16	18	20	22

Solution:

The necessary calculations are given below:

Years	Values	5-Year Moving		7-Year Moving		9-Year Moving	
		Total	Average	Total	Average	Total	Average
1990	2	---	---	---	---	---	---
1991	4	---	---	---	---	---	---
1992	6	30	6	---	---	---	---
1993	8	40	8	56	8	---	---
1994	10	50	10	70	10	90	10
1995	12	60	12	84	12	108	12
1996	14	70	14	98	14	126	14
1997	16	80	16	112	16	---	
1998	18	90	18	---	---	---	---
1999	20	---	---	---	---	---	---
2000	22	---	---	---	---	---	---

Example: Compute 4-year moving averages centered for the following time series:

Years	1995	1996	1997	1998	1999	2000	2001	2002
Production	80	90	92	83	87	96	100	110

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<u>Solution:</u>

The necessary calculations are given below:

Year	Production	4-Year Moving Total	4-Year Moving Average	2-values Moving Total	4-year Moving Average Centered
1995	80	---	---	---	---
1996	90	345	86.25	---	---
1997	92	352	88.00	174.25	87.125
1998	83	358	89.50	177.50	88.750
1999	87	366	91.50	181.00	90.500
2000	96	393	98.25	189.75	94.875
2001	100	---	---	---	---
2002	110	---	---	---	---

⇐ Advantages and Disadvantages of the Moving Average Method

Advantages and Disadvantages of the Semi-Averages Method ⇒

Please share, it really helps us a lot