



INDIAN SCHOOL NIZWA - WORKSHEET

1967	98	132	126	144
1968	140	164	182	184

9. The average number (in lakh) of working days lost in strikes during each year of the period 1981-90 was

years	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Average (in lakh)	1.5	1.8	1.9	2.2	2.6	3.7	2.2	6.4	3.6	5.4

Using 3 – yearly moving averages answer the following questions

- a) Determine the trend value for the year 1982.
- b) Determine the moving average for the year 1985
- c) The sum of the moving averages for the year 1984 and 1986.
- d) Draw the moving average graph.

10. Consider the following data

Years	2004	2005	2006	2007	2008	2009	2010
Profit (in thousand)	114	130	126	144	138	156	164

And by using method of least squares answer the following questions

- a) Find the equation of trend line
- b) Determine the slope of the trend line
- c) The sum of the trend value for the year 2009 and 2006.

11. Fit a straight line trend by the method of least squares to the following data on sales (₹ in lakhs) for the period 2005-2012.

Year	2005	2006	2007	2008	2009	2010	2011	2012
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	sales	76	80	130	144	138	120	174	190
	i) Calculate the trend values from 2005 to 2012.								
	ii) What will be predicted sales for 2015, assuming that the same rate of change continues?								
12.	The following table shows the quarterly sales (₹ in crore) of a real estate company. Compute the trend by quarterly moving averages.								
	Quarters	Q_1	Q_2	Q_3	Q_4				
	years								
	2018	12	14	18	20				
	2019	18	16	20	22				
	2020	27	24	30	36				
13.	Fit a straight-line trend by the method of least squares and estimate the trend for the year 2023.								
	Year	2014	2015	2016	2017	2018	2019	2020	
	Sales (in ₹ lakh)	26	26	44	42	108	120	166	
14.	Consider the following data, calculate 4 yearly centred moving averages.								
	Year	2010	2011	2012	2013	2014	2015	2016	
	Income (₹ in lakh)	4	5	7	6	3	4	6	