

Math

Below is data from the Eureka climate station in Greenland, where evidence of global warming has been extensively studied. Look at the data then answer the questions below.

Year	Average Temperature (Celsius)	Decade Average
1970	-19.93	1970-1979:
1971	-19.8	1980-1989:
1972	-21.56	1990-1999:
1973	-21.1	2000-2004:
1974	-20.94	
1975	-20.53	
1976	-20.69	
1977	-19.38	
1978	-20.16	
1979	-20.83	
1980	-20.22	
1981	-17.88	
1982	-19.74	
1983	-19.63	
1984	-20.83	
1985	-20.31	
1986	-20.57	
1987	-21.02	
1988	-17.61	
1989	-20.53	
1990	-19.51	
1991	-18.48	
1992	-20.74	
1993	-18.78	
1994	-18.06	
1995	-19.24	
1997	-18.92	
1998	-17.38	
1999	-18.67	
2000	-19.9	
2001	-18.61	
2002	-17.92	
2003	-17.51	
2004	-18.72	

Questions

1. Find the average temperature for each of the past three decades and the available data for this decade. What trend do you notice?
2. Find the mean, median, and mode of temperatures between 1970 and 2004. Do the data give evidence of global warming?

3. Plot a graph of the temperatures. Use this data to extend your graph out to the next ten years. What does your prediction show?
4. If you have access to a computer and the internet, go to <http://data.giss.nasa.gov/csci/stations/>. On the world map or the map of the US, click on the station closest to your hometown. Compile the data from the last 25 years. Is it similar to or different from the data above?
5. For homework, bring in another data set or graph from a different source that illustrates global warming.