

Project: Municipal Waste The table shows the municipal waste a_n (in millions of tons) recovered in the United States from 1991 through 2010. (Source: U.S. Census Bureau)

Year	Waste, a_n
1991	37.0
1992	40.6
1993	43.8
1994	50.6
1995	55.8
1996	57.3
1997	59.4
1998	61.1
1999	64.8
2000	69.5
2001	69.3
2002	70.5
2003	74.9
2004	78.0
2005	79.9
2006	82.2
2007	84.8
2008	83.9
2009	82.0
2010	85.1

- Use a graphing utility to plot the data. Let n represent the year, with $n = 1$ corresponding to 1991. Do you think the data could be represented by an arithmetic sequence? Explain your reasoning.
- Use the *linear regression* feature of the graphing utility to find an arithmetic sequence for the data.
- Create a table that compares the actual data values with the values given by the linear sequence.
- Does it appear that the model is a good fit for the data? Explain your reasoning.
- Use the sequence from part (b) to estimate the municipal waste recovered in 2011 and 2012.
- Use the Internet to find the actual municipal waste recovered in 2011 and 2012, and compare these values with the estimates from part (e).