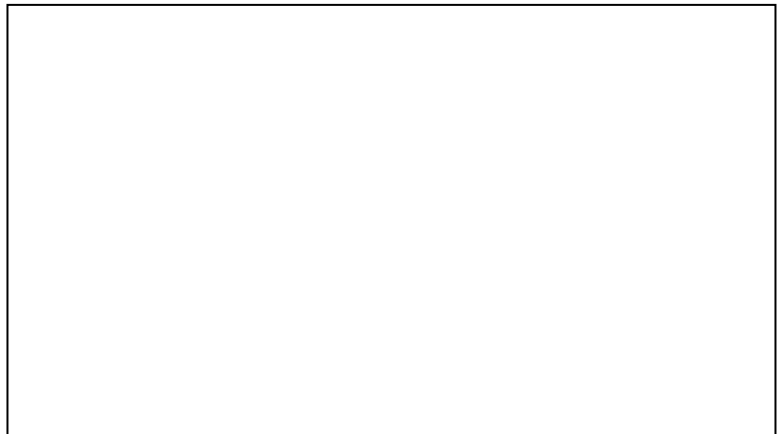


The following table shows the number of endangered and threatened species in the US from 2003 through 2013

<u>YEAR</u>	<u>NUMBER</u>
2003	813
2004	941
2005	962
2006	1053
2007	1132
2008	1194
2009	1205
2010	1244
2011	1254
2012	1262



- (a) Use a graphing utility to plot the data as a scatter plot.
- (b) Use your graphing calculator to find a linear model of the data and sketch it in the above viewing window.
- (c) Use your graphing calculator to find a quadratic model of the data and sketch it in the above viewing window

**LINEAR**

**a =** \_\_\_\_\_

**b =** \_\_\_\_\_

**r =** \_\_\_\_\_

**QUADRATIC**

**a =** \_\_\_\_\_

**b =** \_\_\_\_\_

**c =** \_\_\_\_\_

**r =** \_\_\_\_\_

**(D) Which of the models has the higher correlation and what is that correlation?**

**BETTER MODEL:** \_\_\_\_\_

<b>Very Strong Correlation</b>	<b>Strong Correlation</b>	<b>Good Correlation</b>	<b>Weak Correlation</b>	<b>No Correlation</b>
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**(E) Using the better model calculate the number of endangered and threatened species for the United States in 2012.**

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