**4.** The following is a table of the average NBA salaries from 1980 (t = 0) to 1998.

| Time since 1980 in years | 0 | 5 | 10 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|
| Salary in thousands of dollars | 170 | 325 | 750 | 1900 | 2000 | 2200 | 2600 |

a.  **Use your calculator** to graph the **scatter plot** of the points. **Give the window** from your calculator.

b.  Does the function appear to be **linear or exponential**? **How do you know?**

c.  **Use your calculator** to **find a model** that could be used to predict the salary of an NBA player for any year.

d.  **Use your model to predict the salary for an NBA player in 2015.**

e.  **In what year** does your model predict that the salary of an NBA player will **first reach $4 million?**

**4.** The following is a table of the number of votes cast in a sample of the presidential elections from 1840 (t = 0) to 2004.

| Time since 1840 in years | 0 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 164 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Votes Cast | 2.4 | 4.6 | 9.2 | 14 | 26.7 | 49.7 | 68.8 | 86.5 | 105.4 | 122.2 |

a.  **Use your calculator** to graph the **scatter plot** of the points. **Give the window** from your calculator.

b.  Does the function appear to be **linear or exponential**? **How do you know?**

c.  **Use your calculator** to **find a model** that could be used to predict number of votes cast for any year.

d.  **Use your model to predict the number of votes cast in 2016.**

e.  **In what year** does your model predict that the number of votes will **first reach $200 million?**