

## Math 181, Fall 2018 Handout: Two functions

1. Consider the following table of men's Olympic pole vault records over the period 1900–1912:

|             |      |      |      |      |
|-------------|------|------|------|------|
| year        | 1900 | 1904 | 1908 | 1912 |
| height (in) | 130  | 138  | 146  | 154  |

(a) Considering the pole vault height as a function of the year, what kind of function is it?

(b) Write a formula for the function.

2. The following table has the population of Nevada between 2000–2006.

| Year | Population (millions) | Change in population (millions) |
|------|-----------------------|---------------------------------|
| 2000 | 2.020                 |                                 |
| 2001 | 2.093                 | 0.073                           |
| 2002 | 2.168                 | 0.075                           |
| 2003 | 2.246                 | 0.078                           |
| 2004 | 2.327                 | 0.081                           |
| 2005 | 2.411                 | 0.084                           |
| 2006 | 2.498                 | 0.087                           |

(a) Considering the population as a function of the year, what kind of function is it?

(b) Write a formula for the function.