## Formulating and Solving Linear Equations

In 1990 Florida's population was approximately 12,940,000. In 1995 Florida's population was approximately $14,930,000$. Assuming that Florida's population was growing in approximately a linear manner between 1990 and 2005 write a linear equation for the relationship between Florida's population and time.

| Florida's Population |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year | Years <br> Since <br> 1990 <br> ( | Population <br> (millions) <br> ( |  |  |
| 1990 |  | 12.94 | $\Delta \mathrm{P}(\mathrm{t})$ | $\Delta \mathrm{P}(\mathrm{t}) / \Delta \mathrm{t}$ |  |
| 1995 |  | 14.93 |  |  |  |
| 2000 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Show how to use your linear equation to estimate Florida's population in the year 2000.

Show how to use your linear equation to estimate when Florida's population will reach $20,000,000$ and when it will reach $25,000,000$.

