Project: Bachelor's Degrees The table shows the number $B$
(in thousands) of bachelor's degrees earned by women in the United States from 1998 through 2009. The data can be approximated by the linear model
$B=23.96 t+464.4, \quad 8 \leq t \leq 19$
where t represents the year, with $t=8$ corresponding to 1998.
(Source: U.S. Census Bureau)

| Year | Bachelor's degrees, $B$ |
| :---: | :---: |
| 1998 | 664 |
| 1999 | 682 |
| 2000 | 708 |
| 2001 | 712 |
| 2002 | 742 |
| 2003 | 776 |
| 2004 | 804 |
| 2005 | 826 |
| 2006 | 855 |
| 2007 | 875 |
| 2008 | 895 |
| 2009 | 916 |

(a) Use a graphing utility to plot the data and graph the model in the same viewing window.
(b) Use the model to approximate the number of bachelor's degrees earned by women for each year from 1998 through 2009.
(c) Compare the estimated to the actual data. Is the model a good fit for the data? Explain your reasoning.
(d) Wh at are the slope and $y$-intercept of the model? Interp ret their meaning in the context of the problem.
(e) Use the model to predict the number of bachelor's degrees earned by women in 2015.

