

## 7.1–7.2 Quiz



**Deer** The table shows two data sets for the projected growth of a deer population in a forest. In Exercises 1–8, use the table.



Year	Set A	Set B
2012	200	200
2013	224	224
2014	248	251
2015	272	281
2016	296	315
2017	320	352
2018	344	395

The deer population in the United States is estimated at over 20 million. In most states, the population is managed by the state's Department of Fish and Wildlife.

- Describe the pattern in set A. Then make a scatter plot of the data.
- Use set A to predict the deer population in 2022.
- Describe the pattern in set B. Then make a scatter plot of the data.
- Use set B to predict the deer population in 2022.
- Using set A, when does the deer population exceed 500?
- Using set B, when does the deer population exceed 500?
- Suppose information from a previous study reveals that the deer population was 113 in 2007. Which model fits these data better? Explain your reasoning.
- Suppose the deer population is growing logarithmically and the maximum sustainable population is 500 deer. Sketch a graph that illustrates this type of growth for the deer population.

