

## Answers to 8.3 Comparing Functions

- 1) Linear
- 3) Linear
- 5) Quadratic
- 7) Quadratic
- 9) Exponential
- 11) d. 4, 16, 16
  - e.  $f(x)$  has the slowest rate of change over the interval.  $g(x)$  and  $h(x)$  have the same rate of change over the interval, which is four times as fast as the rate of change for  $f(x)$ .
- 13) Alejandro's
- 15) School A is expecting a constant rate of change in their enrollment size. School B is expecting exponential growth each year, which results in a much faster growth rate as the years go on. For the first 10 years, school A will have more students. After the 11th year, school B will begin to have more students.