

Homework

p. 482: 25, 28, 29, 30, 35

25. ★ **MULTIPLE CHOICE** The student enrollment E of a high school was 1310 in 1998 and has increased by 10% per year since then. Which exponential growth model gives the school's student enrollment in terms of t , where t is the number of years since 1998?

(A) $E = 0.1(1310)^t$

(B) $E = 1310(0.1)^t$

(C) $E = 1.1(1310)^t$

(D) $E = 1310(1.1)^t$

WRITING MODELS In Exercises 28–30, write an exponential growth model that describes the situation.

28. In 1992, 1219 monk parakeets were observed in the United States. For the next 11 years, about 12% more parakeets were observed each year.
29. You deposit \$800 in an account that pays 2% annual interest compounded daily.
30. You purchase an antique table for \$450. The value of the table increases by 6% per year.
35. **DVD PLAYERS** From 1997 to 2002, the number n (in millions) of DVD players sold in the United States can be modeled by $n = 0.42(2.47)^t$ where t is the number of years since 1997.
- Identify the initial amount, the growth factor, and the annual percent increase.
 - Graph the function. Estimate the number of DVD players sold in 2001.