**Chapter 7 Practice Test** SCORE \_\_\_\_\_\_\_\_\_\_\_

**Write the letter for the correct answer in the blank at the right of each question.**

**1.** Find the domain and range of the function *y* = -4

**2.** Create two exponential equations, where one function represents exponential *growth* while the other equation represent exponential *decay*.

**3.** Use the equation of the exponential function whose graph passes through the points

(0, 4) and (1, 24) to find the value of *y* when *x* = –2.

**4.** Solve = .

**5.** Solve = .

**6.** Solve < .

**7.** Write the equation = 7 in logarithmic form.

**8.** Evaluate .

**9.** Solve = –2.

**10.**  > .

**1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Chapter 7 Practice Test** *(continued)*

**11.** Use ≈ 0.4307 and ≈ 0.6826 to approximate the value of

**12.** Solve + = 3.

**13.** Solve = 50. Round to the nearest ten-thousandth.

**14.** Solve < 28. Round to the nearest ten-thousandth.

**15.** Use common logarithms to approximate 207 to four decimal places.

**16.** Suppose you deposit $3000 in an account paying 2% annual interest, compounded continuously. Use *A* = to find the balance after 5 years.

**17.** Solve 4 + 3= 27.

**18.** Solve ≥ 2.

**19. CHEMISTRY** A particular compound decays according to the equation *y* = , where *t* is in days. Find the half–life of this compound.

**20. ANTIQUITY** At a town with an annual Magic tournament, the cost of a beta starter deck has increased 6.2% annually. If the average beta starter deck cost $19.00 in 1992 and this growth continues, what will an average hotel room cost in 2017? Use *y* = *a* and round to the nearest cent.

**Bonus** Solve

**11. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**12. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**13. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**14. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**15. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**16. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**17. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**18. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**19. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**20. \_\_\_\_\_\_\_\_\_\_\_\_\_**

**B: \_\_\_\_\_\_\_\_\_\_\_\_\_**