Alg 2B
Ch 8
Pr 8.2B

Evaluate to 4 decimal places.

1. e^2 2. $e^{-2.5}$ 3. $e^{\frac{1}{3}}$ 4. $e^{\sqrt{2}}$

5. The formula $A = 4000e^{rt}$ can be used to find the dollar value of an investment of \$4000 after t years when the interest is compounded continuously at a rate of r percent.
   a. Find the value of the investment after 8 years if the interest rate is 5%.
   b. Find the value of the investment after 9 years if the interest rate is 8%.

6. The formula $A = 6000e^{rt}$ can be used to find the dollar value of an investment of \$6000 after t years when the interest is compounded continuously at a rate of r percent.
   a. Find the value of the investment after 6 years if the interest rate is 7%.
   b. Find the value of the investment after 8 years if the interest rate is 8%.

7. Marion decides to invest \$5000 at 5% interest compounded continuously. Find the value of the investment after 2 years.

8. True or False: The formula for interest compounded continuously is $A = Pe^{rt}$

Describe the transformations done to the parent function. Make tables, then graph. Draw the asymptote. Find domain and range.

9. $y = 5^{x-1}$ 10. $y = 5^{x+2}$ 11. $y = 5^{x-1} + 3$

12. Write the equation of the parent function $y = ab^x$ that was shifted 3R, 2U.