

Sept. 22 Worksheet

1. Change each of the following equations from exponential to logarithm form, then solve for x.

$$7^x = 49$$
$$5496$$

$$4^x = 64$$

$$3^x = 81$$

$$18^x =$$

2. Transform the following into its inverse, then solve for x.

$$e^x = 16$$

$$e^x = 127$$

$$4(16)^x = 48$$

$$6e^x - 24 = 18$$

3. You deposit \$1,500 into a savings account with a simple annual interest rate of 4%. How much interest will you earn in 3 years?

4. A person borrows \$5,000 for 6 months at a simple interest rate of 8% per year. How much interest will they pay?

5. An investment earned \$250 in simple interest over 2 years at an annual rate of 5%. What was the original principal amount?

6. A loan of \$3,000 accrues \$360 in simple interest over a period of 2 years. What is the annual interest rate?

7. What is the present value of a bond that will be worth \$12,000 in 11 months, assuming a simple annual interest rate of 8%?