

Math 3 Review Day 5- Inverses, Logarithms and Exponentials

1. Find the inverse of each.

a. $f(x) = -3(x - 2)^4 + 8$

c. $h(x) = 3^x - 8$

b. $g(x) = \frac{2\sqrt{3x-2}}{-4}$

d. $k(x) = 2\log_4 x - 3$

2. Solve.

a. $2^{x-4} = 4^8$

c. $12^{5-3x} = 4^{2x-7}$

b. $5^{3x+9} = 8$

3. Precious puts \$500 in a bank account that earns 2.6% interest.

a. If the interest was compounded monthly, how much would be in her account after 20 years if she does not add any money to the account?

b. If the interest was compounded quarterly, how much would be in her account after 20 years if she does not add any money to the account?

4. There is a collection of 200 bacteria in the school bathroom that is growing at a rate of 1.5% per day. How many bacteria will be in the bathroom at the end of 2 weeks?