Identify the domain, range, intercept, and asymptote of the exponential function. Then describe the end behavior.

$f(x) = 7 \cdot 2^x$

Determine whether the function represents exponential growth or decay. Write the base in terms of the rate of growth or decay, identify r, and interpret the rate of growth or decay.

$y = 150 \cdot 3.9^x$

Interest is compounded semianually. Find the amount in the account after the given time.

Principal	Rate of Interest	Time
$3000	7%	3 years

Find the amount in the account for the given principal, interest rate, time, and compounding period.

P = $1,100, r = 2.5%, t = 6 years; compounded daily

Find the amount in the account for the given principal, interest rate, time, and compounding period.

P = $1,300, r = 3.7%, t = 4 years; compounded continuously

Write the inverse of the exponential function.

$y = 6^x$

Write in exponential form.

$$-3 = \log_2 \frac{1}{8}$$

How long does it take for $350 to grow to $1,470 at 4% annual percentage rate compounded continuously?

Find the inverse of the function.

$$y = \log_4 (3x)$$

The altitude A, in feet, of a plane t minutes after takeoff is approximated by the function $A = 7{,}000 \ln(0.5t) + 2{,}000$. Solve for t in terms of A. What is a situation in which it would be easier to use your new equation rather than the original?