

EXAMPLE

Solve each equation for x using logs.

$$P = P_0 e^{kx}$$

$$e^{x+3} = 2^x$$

$$6e^{\ln(x^2)} = 12$$

EXAMPLE

Find the derivative of the given functions. Assume A and B are constants.

I. $w = (t^2 + 2)^{99}$

II. $f(t) = e^{-3t}(t^2 + 3^t)$

EXAMPLE

Total cost, C , and revenue, R , are approximated by the functions below, both in dollars. Identify the fixed cost, marginal cost per item, and the price the commodity is sold at.

$$C = 5250 + 2.3q$$

$$R = 3.7q$$