




If you invest $4000 in an account that pays 6% continuous interest, how long will it take for the balance to reach $6000?

(Round to 2 decimal places.)

$P = \$4{,}000$

$A = \$6{,}000$

$r = 6\% = 0.06$

$t = ?$

$$\frac{6000}{4000} = \frac{4000e^{0.06t}}{4000}$$

$$A = Pe^{rt}$$

$$\ln x^y = y \ln x$$

$$\ln e = 1$$