

Trig/Precalculus

SLOT

Practice with e

Using a calculator, evaluate each of the following expressions. Round to the 4th decimal place when necessary.

1. e^3 2. e^6 3. e^{-2} 4. e^0 5. $e^{\frac{5}{2}}$ 6. e^e

Interest that is compounded *continuously* is given by the formula $A = Pe^{rt}$, where P is the principal (how much you put into savings), A is the ending amount/value of the account, r is the interest rate, and t is the time (in years) the money accrues interest. Find the value of the account given the following conditions. Be sure to change the rate to a decimal. Round to the nearest penny.

7. Principal: \$2000, annual interest rate: 5.1%, time: 3 years
8. Principal: \$400, annual interest rate: 7.6%, time: 1.5 years
9. Principal: \$950, annual interest rate: 6.5%, time: 10 years
10. Principal: \$10000, annual interest rate: 3.6%, time: 6 months*