

Compound Interest
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Compound Amount

$$S = P(1 + r)^n$$

S = compound amount

P = principal

$$S = P(1 + r/k)^{kt}$$

n = years x compounding periods (k)

r = rate / compounding periods (k)

Compound Amount Under Continuous Interest

$$S = Pe^{rt}$$

S = compound amount

P = principal

r = interest rate

t = time

Effective Rate under Continuous Interest

$$e^r - 1$$

Present Value under Continuous Interest

$$P = Se^{-rt}$$