

Solution:

We'll use the following formulae for composite percentage

$$FV = PV(1 + i)^n,$$

where **FV** - future value, **PV** - present value, **i** - interest rate, **n** - number of years.

In our case, **FV = PV + 6000**, so we get:

$$PV + 6000 = PV \cdot 1.07^5$$

$$1.4026 \cdot PV - PV = 6000$$

$$0.4026 \cdot PV = 6000$$

$PV = 6000/0.4026$ = is the sum of money we need to put into the account to get \$6,000 more in 5 years.

Answer: \$14,904.92