Problem:

A rich uncle wants to make you a millionaire. How much money must he deposit in a trust fund paying 7% compounded quarterly at the time of your birth to yield $1,000,000 when you retire at age 56? (Round your answer to the nearest cent)

Define values:

A=1000000 (how much money waiting for us in 56 years)
r=7%=0.07 - payment by
m=4 – because each year has 4 quarter
t=56 – our retire age(how long the money will accumulate)

Use formula:

$$A = P\left(1 + \frac{r}{m}\right)^{mt}$$

Find P:

$$1000000 = P(1 + \frac{0.07}{4})^{4*56}$$

$$P = \frac{1000000}{48.72} = 20525.45$$

Answer: 20525.48$.