Lesson 3: Present Value. *How much is it worth now?*

Ex. 1: Dianne owns a Savings Bond that was given to her by her grandmother. The Bond earned 6%/a interest compounded monthly. When she cashed it in it was worth $3372.13. How much did her grandmother pay for it five years ago?

\[ i = \frac{0.06}{12}, \quad n = 0.005 \]
\[ n = 5 \times 12, \quad n = 60 \]
\[ A = P(1+i)^n \]

\[ PV = A(1+i)^n \]

\[ PV = 3372.13 \times (1.005)^{-60} \]
\[ PV = \# 2500 \]

Example 2: Sammy will need $3000 when he starts college in two years. His bank offers an 8%/a compounded quarterly short term savings account. How much would he need to deposit today to reach his goal?

\[ i = \frac{0.08}{4} \]
\[ i = 0.02 \]
\[ n = 2 \times 4 \]
\[ n = 8 \]

\[ PV = 3000 \times (1.02)^{-8} \]
\[ PV = 2560.47 \]