

Answer on Question #50991, Economics, Finance

The Smith Construction Company borrows the entire cost of a new dump truck. The loan has an annual interest rate of 12 percent and calls for monthly payments of \$ 1,000 over a five year period. What is the cost of truck.

We calculate the present value of annuities (\$1,000):

$$PV = \frac{\$1,000}{0.12} * \left[1 - \frac{1}{(1+0.12/12)^{5*12}} \right] = \$3746.253$$

That's why the cost of truck is \$3746.253