Answer on Question #38990 – Economics - Economics of Enterprise

A contract calls for the payment of $ 400 at the end of four years and $ 8000 at the end of ten years. if interest rate is 5 percent what is the present value of this contract.

Solution

Present value, also known as present discounted value, is a future amount of money that has been discounted to reflect its current value, as if it existed today. The present value is always less than or equal to the future value because money has interest-earning potential, a characteristic referred to as the time value of money.
The present value of the contract is

PV =$\sum \frac{CF_n}{(1+r)^n}$ = 400/(1+0.05)^4 + 8,000/1.05^10 = $5,240.39