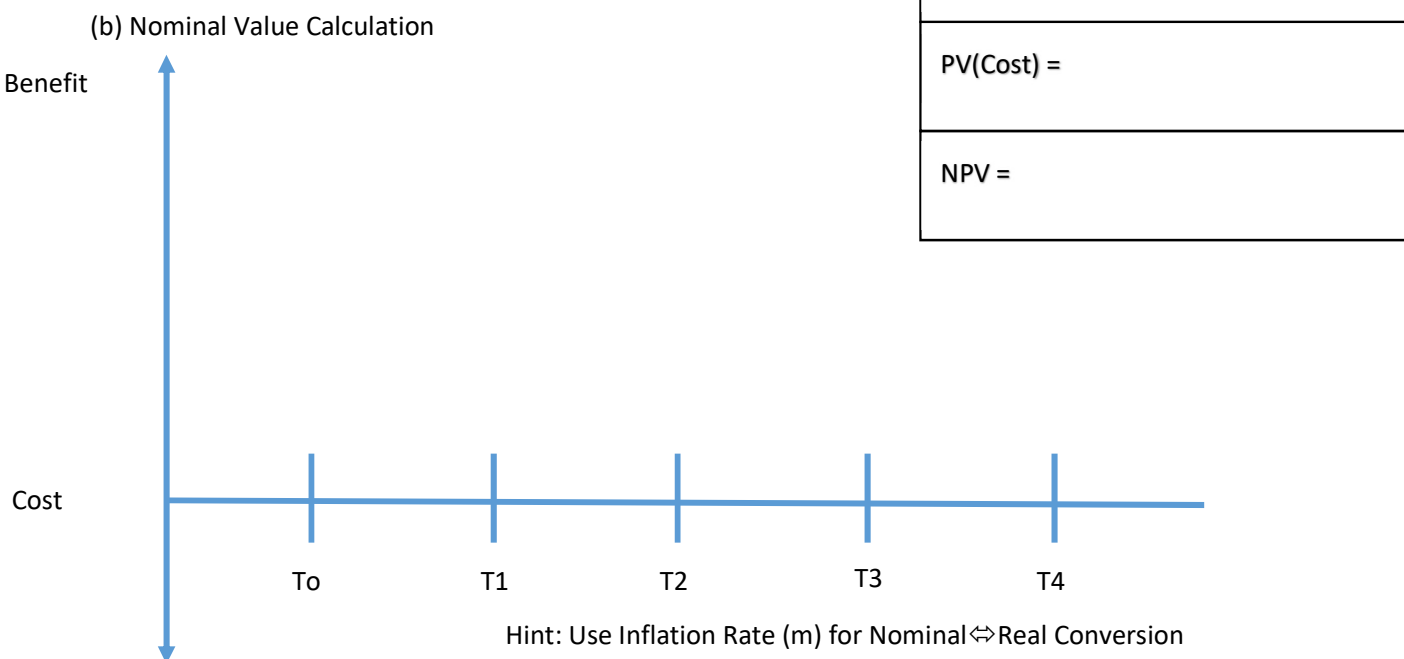
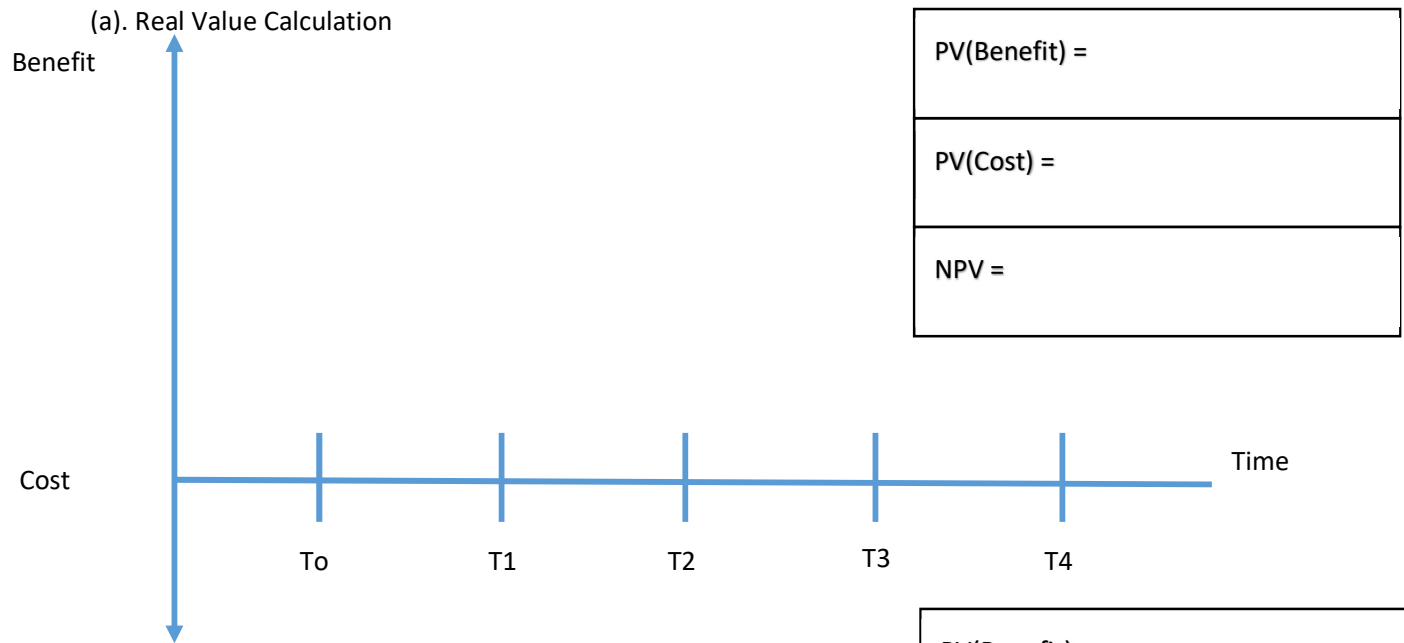


Cost Benefit Analysis Worksheet (Dec.2.2019)

A city wants to add large garbage trucks to dispose garbage to rural landfill. If purchased, the city would save \$100,000 in real disposal costs during the first year and the same amount in each successive year. The trucks would be purchased today for \$500,000, and would be sold after 4 years. The current market value of 4-year-old trucks of the same type and quality as the city might buy is \$200,000. The city can currently borrow money at a market interest rate of 6%. Analysts expect that inflation will be 4% during the next 4 years. Should the city buy the trucks? Answer the question by calculating NPV using (a) Real value calculation (b) Nominal value calculation. Hint: Values in the question are all in Real value.



Hint: Use Inflation Rate (m) for Nominal ↔ Real Conversion
 Use Real/Nominal Discount Rate for Present Value Calculation.