

Fundamentals of Engineering Economic Analysis
2nd edition White Solutions Manual

SKU: 9781118987636-SOLUTIONS

Chapter 1—An Overview of Engineering Economic Analysis

Sample Responses to Discussion Questions

1. What do the preceding two examples have in common?

Sample Response: We have two entities—one large (with revenue surpassing \$500 billion) and a much smaller one (an individual investor) determining the best way to invest their resources for future return.

2. What role does engineering economic analysis play in these scenarios?

Sample Response: In each case, both entities have limited financial resources. They must make decisions on how best to invest these resources for the greatest future benefit, considering their time frame and propensity for risk. Engineering economic analysis can assist decision makers with examining the economic attractiveness of investment alternatives, and thereby justifying decisions.

3. Is an engineering economic analysis just as relevant for the complicated business transactions at Walmart as for Robert Thompson's much simpler transactions?

Sample Response: Yes. Granted the analyses will be much more complicated for Walmart than for Robert Thompson, but both entities can benefit from careful planning and analysis. Where Robert can likely perform this analysis himself (with a good engineering economic course under his belt), Walmart must rely on an entire organization to assist with the complicated decisions that it must make affecting millions of associates who support thousands of stores across the globe. In the end, however, the analyses are equally important to each party, which both have much to gain or lose.

4. Compare the length of the financial planning horizon that each investor (Walmart and Robert) is considering. Are they the same or different?

Sample Response: The planning horizon for Walmart is likely much longer than Robert's. As a recent engineering graduate, Robert should be commended for thinking about his future at such a young age when many of his peers might simply be tempted to spend their paycheck on current needs. In comparison, Walmart has responsibility to its shareholders (such as their associates) who may have made very long-term investments in the company (such as having worked there for 25 years). This makes a long-term financial planning horizon appropriate.