ACG420 Unit 5 IP

Deer Valley Lodge, a ski resort in the Wasatch Mountains of Utah, has plans to eventually add five new chairlifts. Suppose that one lift costs $2 million, and preparing the slope and installing the lift costs another $1.3 million. The lift will allow 300 additional skiers on the slopes, but there are only 40 days a year when the extra capacity will be needed. (Assume that Deer park will sell all 300 lift tickets on those 40 days.) Running the new lift will cost $500 a day for the entire 200 days the lodge is open. Assume that the lift tickets at Deer Valley cost $55 a day. The new lift has an economic life of 20 years.

1. Assume that the before-tax required rate of return for Deer Valley is 14%. Compute the before-tax NPV of the new lift and advise the managers of Deer Valley about whether adding the lift will be a profitable investment. Show calculations to support your answer.
2. Assume that the after-tax required rate of return for Deer Valley is 8%, the income tax rate is 40%, and the MACRS recovery period is 10 years. Compute the after-tax NPV of the new lift and advise the managers of Deer Valley about whether adding the lift will be a profitable investment. Show calculations to support your answer.
3. What subjective factors would affect the investment decision?

Please show work and use word.