UNIVERSITY OF ALBERTA
ALBERTA SCHOOL OF BUSINESS

BUEC 311: Business Economics, Organization and Management

Problem Set #5

Consumer Preferences

October 22, 2021

1. Suppose that Jim is contemplating whether to spend the money to buy a promotional ski card for this upcoming season. His utility function for skiing and all other goods is given by U=x*s+x, such that his marginal utility for skiing is given by $U_s = x$ and his marginal utility for other consumption is $U_x = s + 1$. Assume that he has $500 of disposable income to allocate across these goods, and that the price of a daily lift ticket is $100. Use a price of $1 for the indexed other goods (i.e. the budget constraint has intercept at x=500 and s=5.)

a) With no promotional discount, and assuming he can only ski full days, how many days should Jim ski this year?

b) Now assume that a promotional card costs $50 but offers half price lift tickets? Should Jim buy the card?

c) How many days will he ski once he has purchased the card?

d) Now, let's ask a different question. Jim is contemplating a change of job that will give him more disposable income but will mean he is near to a more expensive ski hill. If lift ticket prices are more expensive ($150 per ticket) and the job offers him $100 more in disposable income, will Jim end up better off, indifferent or worse off. Assume he can only ski full days.

e) If Jim can ski half days for $75 per ticket, will he be indifferent, better off or worse off with the new job and $600 in disposable income?

f) If Jim can ski half days, but at a higher price of $100 per ticket, will he be indifferent, better off or worse off with the new job and $600 in disposable income?