Question 20

Not yet answered

Marked out of 3.00

Flag question

Edit question

I mostly do my own bike repairs, but on average, I take my bike in for service at my local bike shop twice per year. Suppose that my utility function for bike service (s) and other bike-related goods (x) is U=xs+5x, so my marginal utility of bike service is U_s=x and my marginal utility for other bike-related goods is U_x=s+5. The price of a bike service appointment is p_s=100 and you can use a price of p_x=1 for other goods. Assume that I have $900 to allocate to bike service and other bike-related goods. Which of the following statements are true?

Select all that apply:

- [x] a. I am maximizing my utility by visiting the bike shop twice per year for service. cross out
- [x] b. If my bike shop offered me a 40% discount to $60 per service visit, I would spend $300 on bike service. cross out
- [ ] c. Using the orginal price of p_s=$100, if I was able to allocate an extra $200 to spending on bike service and other bike-related goods, I would have my bike serviced two more times. cross out
- [ ] d. Using the original assumptions (p_s=100, income available = $900), assume that Guri the bike shop owner offers to let me pay in advance for 4 bike service visits for the price of 3. This is a good deal and I should pay him $300 right now! cross out
- [ ] e. Using the original assumption of available income of $900, I'm better off with 4 bike service visits for $300 than with the discounted price of $60 per bike servicing visit. cross out
- [ ] f. If the discounted price of $60 per bike servicing visit were available through a two-part pricing regime where I'd pay $120 to join Guri's cycling club and then I could get my bike serviced for a lower price, I should do this. cross out

BC $Y = 900 = x + P_s s$

MRS = MRT $\frac{x}{P_s} = s + 5$

$x = P_s(s+5)$

$900 = P_s(s+5) + P_s s$

$900 = P_s(2s+5)$

a) $900 = 100(2s+5)$

$9 = 2s + 5$

$2s = 4,\ s = 2$

b) $900 = 60(2s+5)$

$15 = 2s + 5$

$s = 5 \rightarrow 5 \times 60 = 300$

c) $1100 = 100(2s+5)$

$11 = 2s + 5$

$6 = 2s,\ s = 3$

d) orginal $u(2,700) = 700 \times 2 + 700 \times 5 = 4900$

now $u(4,600) = 600 \times 4 + 600 \times 5 = 5400$

b) $u(5,600) = 600 \times 5 + 600 \times 5 = 6000$

f) $780 = 60s + 60(s+5)$

$13 = 2s + 5,\ s = 4 \rightarrow x = 540 \Rightarrow u(4,540) = 4860$

Question 21

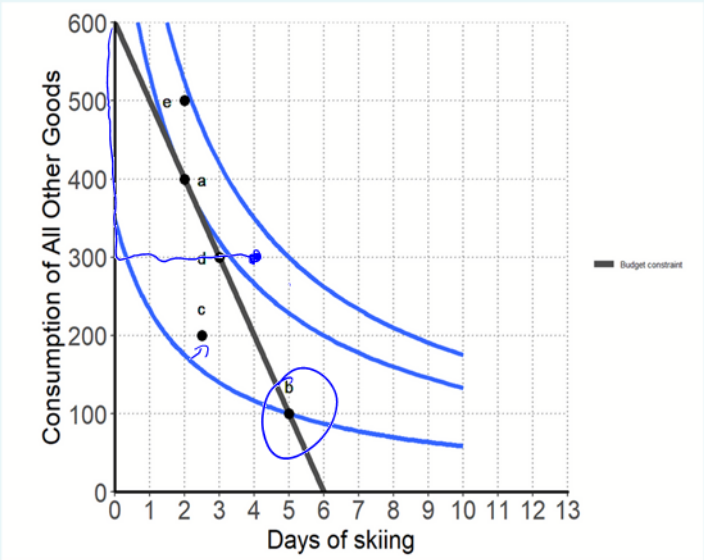
Not yet answered

Marked out of 3.00

Flag question

Edit question

Looking at the following plot of a individual's preferences over skiing and other goods consumed. Assume that all the standard properties for preferences are satisfied for this consumer, and that both skiing and other goods are normal goods. Which of the following are true?



Consumer preference map showing indifference curves (blue) and budget constraint (black).

Select all that apply:

- [ ] a. Points a and b are each utility-maximizing points for this consumer. cross out
- [ ] b. Point d will yield a higher level of utility than point c cross out
- [ ] c. Point c is preferred to point b. cross out
- [ ] d. Points b and d are each points where the consumer spends all their available resources. cross out
- [ ] e. If this consumer were offered a ski pass that allowed them 4 days of skiing for $300, they would not buy it. cross out