Assume that the demand for ski lessons from university students is given by $Q = 100 - (1/2)p$, and the supply is given by $Q = (3/2)p$. Which of the following statements is/are true?

Select all that apply:

- [x] a. This demand function tells you that there are consumers willing to pay more than $100 for ski lessons. cross out
- [ ] b. The equilibrium price in the market is equal to $80. cross out
- [x] c. The equilibrium quantity in the market is equal to 75. cross out
- [ ] d. The city decides that it really wants students to get outside to enjoy the winter, so it proposes a discount on ski lessons. University students receive a $20 coupon they can redeem at the hill. The ski hill operators then receive $20 from the city to help pay for lessons. Ski hill operators know about this, so they'll simply charge $20 more for lessons. cross out
- [ ] e. Once the coupons are available, the equilibrium quantity will increase to 70. cross out
- [ ] f. The same number of people will take ski lessons. This isn't something people decide to do because of the price. cross out

Intercept

$0 = 100 - \frac{1}{2}P$

$P = 200$

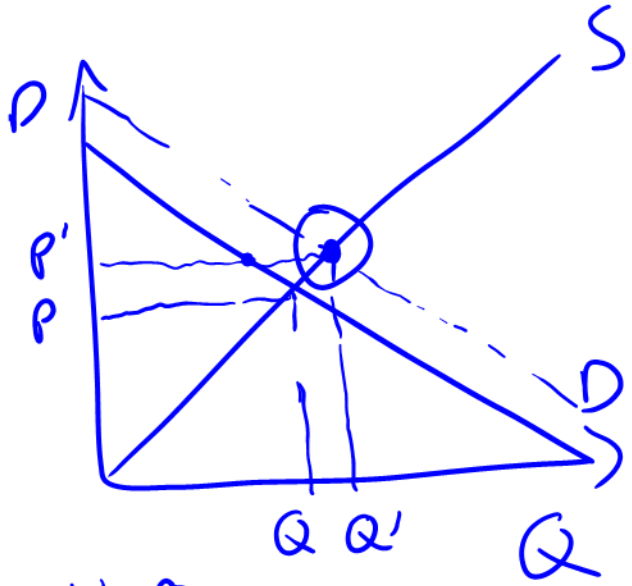
$Q_D = 100 - \frac{1}{2}P \qquad Q_S = \frac{3}{2}P$

$100 - \frac{1}{2}P = \frac{3}{2}P$

$100 = \frac{4}{2}P = 2P$

$P = 50$

$Q = 75$



$Q = 100 - \frac{1}{2}P$

$P = 200 - 2Q + 20$

$Q_D = 110 - \frac{1}{2}P = \frac{3}{2}P = Q_S$

$110 = \frac{4}{2}P = 2P$, $P = 55$

$Q = 82.5$

Question 18

Not answered

Marked out of 5.00

Flag question

Edit question

You've been hired by a ski resort owner to assess the degree to which promotional vouchers might lead to increased spending by their clients this year. The resort is operating well-below capacity, and it has a lot of fixed and sunk costs, and the added costs associated with additional skiers or boarders are very small, so getting more people on the hill is a good thing as long as the total revenue the resort receives increases. Through market research, the resort has concluded that its typical client visits twice (2 times) per year at current lift ticket prices, and so spends $200 per year on lift tickets. The market research firm finds that the typical client also has about $800 of annual, disposable income allocated to winter sports, which they allocate to maximize their utility between skiing or snowboarding and other winter sports. The typical client has a utility function equal to U=XS+4X, and so their marginal utility of skiing is U_s=X and their marginal utility of other winter sports is U_x=S+4. The resort only sells full day tickets.

The resort owner would like to know the implications of a 20% discount on lift tickets. Which of the following would be the most accurate statement of the effect of offering such a promotion?

Select one:

- a. The resort will see an increase in passes sold and a decrease in total revenue. cross out
- b. The resort will see an increase in passes sold and no change in total revenue. cross out
- c. The resort will see an increase in passes sold and an increase in total revenue. cross out
- d. The resort will no change in passes sold and a decrease in total revenue. cross out

Question 19

Not answered

Marked out of 4.00

Flag question

Edit question

The resort owner would like to know the implications of offering clients a one-time offer to purchase 4 lift tickets for the price of 3. Which of the following would be the most accurate statement of the effect of offering such a promotion?

Select one:

- a. The resort's clients will spend more days on the hill, and total revenue will be higher than either the base case or the 20% discount case. cross out
- b. The resort's clients will spend more days on the hill, but total revenue will be lower than either the base case or the 20% discount case. cross out
- c. The resort's clients won't be interested in skiing twice as much, so there will be no change in revenue from the base case. cross out
- d. The resort's clients will spend more days on the hill, but since the average revenue in this case is only $75 per lift ticket, the resort would earn higher revenues by simply offering the smaller 20% discount. cross out

Question 20

Not answered

Marked out of 4.00

Flag question

Edit question

Market research suggests that, for this coming season, the COVID-19 pandemic has reduced the hill's clients' disposable income for winter sports to $600. Hearing this, this ski hill owner figures that there will be more demand for half-day passes as his clients who usually ski 2 days per year would like to reduce their skiing to 1.5 days per year this season to compensate for the 25% reduction in their income. Which of the following statements is most accurate.

Select one:

- a. The owner is correct. Since income has dropped by 25%, the corresponding shift in demand means that clients will want to ski 1.5 days per year. cross out
- b. The owner is incorrect. The drop in income will reduce the demand for days on the hill to 1 day per year. cross out
- c. The hill's clients' demand for skiing is more elastic than their demand for other winter sports, so they'll compensate for the loss of income by not skiing or snowboarding at all this year. cross out
- d. The resort's clients will spend more days on the hill because skiing will help them deal with the trauma of lost income. cross out

Question 21

Not answered

Marked out of 4.00

Flag question

Edit question

With the drop in disposable income related to COVID-19 estimated at $200 (i.e. available income drops from $800 to $600), the owner wonders whether revenue could be preserved by offering a buy two, get one free promotion for their clients. What do you think?

Select one:

- a. With the discount, clients will spend the same as they would in a typical year, and resort revenue will be maintained. cross out
- b. Clients do not have the same amount of money to spend, and so are not prepared to buy 2 lift tickets this year even if they get one free. cross out
- c. If the resort owner offers this discount, it will result in less revenue from typical clients than previous years. cross out
- d. The resort will increase revenue from ski passes despite the drop in income because people will spend more days on the hill. cross out

$P_S = 100$

$Y = 800$

$U = XS + 4X$

$U_S = X$

$U_X = S + 4$

Question 18

Not yet answered

Marked out of 5.00

Flag question

Edit question

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The resort owner would like to know the implications of a 20% discount on lift tickets. Which of the following would be the most accurate statement of the effect of offering such a promotion?

Select one:

a. The resort will see an increase in passes sold and a decrease in total revenue. cross out

b. The resort will see an increase in passes sold and no change in total revenue. cross out

c. The resort will see an increase in passes sold and an increase in total revenue. cross out

d. The resort will no change in passes sold and a decrease in total revenue. cross out

$800 = P_3 S + P_S(S+4)$

Setup

$P_S = 100$

$800 = 100S + 100(S+4)$

$8 = 2S + 4$

$S = 2$

$U(2, 600) = 3600$

Discount.

$P_S = 80$

$800 = 80S + 80(S+4)$

$10 = S + S + 4$

$S = 3$

$P_S = 80$, $Rev = 240$

$U(3, 560) = 3920$ ←

$U(4, 500) = 4000 > U(3, 560) > U(2, 600)$

$Rev = 300 > 240 > 200$

$\frac{X}{P_3} = S + 4$

$X = P_S(S+4)$

Drop in income

$600 = 100(2S+4)$

$6 = 2S + 4$

$S = 1$, $Rev = 100$

$U(1, 500) = 2500$

$U(3, 400) = 2800$