## Self-Check Questions

[1](http://openstax.org/books/principles-microeconomics-3e/pages/chapter-6#fs-idp54001568-solution).

Jeremy is deeply in love with Jasmine. Jasmine lives where cell phone coverage is poor, so he can either call her on the land-line phone for five cents per minute or he can drive to see her, at a round-trip cost of $2 in gasoline money. He has a total of $10 per week to spend on staying in touch. To make his preferred choice, Jeremy uses a handy utilimometer that measures his total utility from personal visits and from phone minutes. Using the values in [Table 6.6](#Table_06_06), figure out the points on Jeremy’s consumption choice budget constraint (it may be helpful to do a sketch) and identify his utility-maximizing point.

|  |  |  |  |
| --- | --- | --- | --- |
| Round Trips | Total Utility | Phone Minutes | Total Utility |
| 0 | 0 | 0 | 0 |
| 1 | 80 | 20 | 200 |
| 2 | 150 | 40 | 380 |
| 3 | 210 | 60 | 540 |
| 4 | 260 | 80 | 680 |
| 5 | 300 | 100 | 800 |
| 6 | 330 | 120 | 900 |
| 7 | 200 | 140 | 980 |
| 8 | 180 | 160 | 1040 |
| 9 | 160 | 180 | 1080 |
| 10 | 140 | 200 | 1100 |

Table 6.6

[2](http://openstax.org/books/principles-microeconomics-3e/pages/chapter-6#fs-idp27417296-solution).

Take Jeremy’s total utility information in [Exercise 6.1](#fs-idp54001568), and use the marginal utility approach to confirm the choice of phone minutes and round trips that maximize Jeremy’s utility.

[3](http://openstax.org/books/principles-microeconomics-3e/pages/chapter-6#fs-idm101555216-solution).

Explain all the reasons why a decrease in a product's price would lead to an increase in purchases.

[4](http://openstax.org/books/principles-microeconomics-3e/pages/chapter-6#fs-idp49918640-solution).

As a college student you work at a part-time job, but your parents also send you a monthly “allowance.” Suppose one month your parents forgot to send the check. Show graphically how your budget constraint is affected. Assuming you only buy normal goods, what would happen to your purchases of goods?