**Marginal Benefit v Marginal Cost Analysis**

*Use the scenario below to complete the following chart and answer the questions that follow:*

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of Cookies** | **Total Benefit** | **Marginal Benefit** | **Marginal**  **Cost** |
| 0 | 0 |  |  |
| 1 | 10 |  |  |
| 2 | 18 |  |  |
| 3 | 24 |  |  |
| 4 | 28 |  |  |
| 5 | 30 |  |  |
| 6 | 31 |  |  |

Abigail is studying for a midterm exam and has the munchies. She grabs a box of chewy chocolate chip cookies and starts eating while working. Each cookie costs her $2

.

**Question 1:**

What is her marginal cost per cookie? \_\_\_\_\_\_\_\_

**Question 2:**

What is the marginal benefit of the first cookie? \_\_\_\_\_\_\_\_

Should she eat the cookie? \_\_\_\_\_\_\_\_\_

**Question 3:**

What is the marginal benefit of the second cookie? \_\_\_\_\_\_\_\_

Should she eat the cookie? \_\_\_\_\_\_\_\_\_

**Question 4:**

What is the marginal benefit of the third cookie? \_\_\_\_\_\_\_\_

Should she eat the cookie? \_\_\_\_\_\_\_\_\_

**Question 5:**

What is the marginal benefit of the fourth cookie? \_\_\_\_\_\_\_\_

Should she eat the cookie? \_\_\_\_\_\_\_\_\_

**Question 6:**

What is the marginal benefit of the fifth cookie? \_\_\_\_\_\_\_\_

Should she eat the cookie? \_\_\_\_\_\_\_\_\_

**Question 7:**

What is the marginal benefit of the sixth cookie? \_\_\_\_\_\_\_\_

Should she eat the cookie? \_\_\_\_\_\_\_\_\_

**Question 8:**

How many cookies would she eat to be rational? \_\_\_\_\_\_

**Question 9:**

A rational consumer who is eating Girl Scout cookies stops eating when

1. the total benefit equals the total cost of eating cookies.
2. the marginal benefit equals the marginal cost of the next cookie.
3. the marginal cost of eating cookies is maximized.
4. the marginal benefit of eating cookies is minimized.
5. the price of the cookie equals the marginal benefit of the next cookie.

**Question 10:**

At the birthday party of your best friend, you see Skylar help himself to a second piece of cake. For this individual, it must be the case that

1. the marginal benefit of the second piece of cake is less than the marginal cost.
2. the total benefit received from eating cake is falling.
3. the ratio of marginal benefit over marginal cost is less than one.
4. the marginal benefit of the second piece of cake is greater than the marginal cost.
5. Skylar is irrationally consuming too much cake.

**Question 11:**

Nancy has the choice to spend one hour studying for an exam, mowing the lawn for one hour at a wage of $6, or babysitting her niece for one hour at a wage of $8. If we know that Nancy has chosen to study for the exam, which of the following is true?

1. The benefit received from studying is greater than the opportunity cost of $8.
2. The opportunity cost of studying is $14, which is less than the benefit received from studying.
3. Nancy is indifferent between studying and mowing the lawn.
4. Nancy's behavior is irrational since babysitting was clearly superior to all other options.
5. Nancy is indifferent between babysitting and mowing the lawn.