**Production Possibilities Curves**

Suppose that the nation of Nestle producers chocolates and cookies. Below are the possible combinations of chocolates and cookies that Nestle can produce.

|  |  |  |
| --- | --- | --- |
| **Combination** | **Chocolates (X axis)** | **Cookies (Y axis)** |
| **A** | 0 | 10 |
| **B** | 2 | 9 |
| **C** | 4 | 7 |
| **D** | 6 | 4 |
| **E** | 8 | 0 |

1. On the graph below, plot the Production Possibilities Curve for Nestle
2. What is the opportunity cost of the first two chocolates produced? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is the opportunity cost of producing 4 chocolates? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is the opportunity cost of producing 6 chocolates? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What is the opportunity cost of producing 4 chocolates? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What is happening to the opportunity cost as Nestle produces more chocolates? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. What is the opportunity cost of the first four cookies produced? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. What is the opportunity cost of producing 7 cookies? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. What is the opportunity cost of producing 9 cookies? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. What is the opportunity cost of producing 10 cookies? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. What is happening to the opportunity cost as Nestle produces more cookies? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Find the combination of chocolates and cookies of 4 chocolates and 12 boxes of cookies. Label this point F. What term best describes this point?
13. Find the combination of chocolates and cookies of 4 chocolates and 6 boxes of cookies. Label this point G. What term best describes this point?
14. Draw a new curve reflecting what the PPC might look like if new cooking technology is invented to speed up production in both industries.

Suppose that the nation of Greenwold producers guns and butter. Below are the possible combinations of guns and butter that Greenwold can produce.

|  |  |  |
| --- | --- | --- |
| **Combination** | **Butter (X axis)** | **Guns (Y axis)** |
| **A** | 0 | 700 |
| **B** | 140 | 600 |
| **C** | 290 | 400 |
| **D** | 410 | 100 |
| **E** | 500 | 0 |

1. On the graph below, plot the Production Possibilities Curve for Greenwold
2. What is the opportunity cost of the first 140 butter produced? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is the opportunity cost of producing 290 butter? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is the opportunity cost of producing 410 butter? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What is the opportunity cost of producing 500 butter? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What is happening to the opportunity cost as Greenwold produces more butter? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. What is the opportunity cost of the first 100 guns produced? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. What is the opportunity cost of producing 400 guns? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. What is the opportunity cost of producing 600 guns? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. What is the opportunity cost of producing 700 guns? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. What is happening to the opportunity cost as Greenwold produces more guns? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Find the combination of chocolates and cookies of 4 chocolates and 12 boxes of cookies. Label this point F. What term best describes this point?
13. Find the combination of chocolates and cookies of 4 chocolates and 6 boxes of cookies. Label this point G. What term best describes this point?
14. Draw a new curve reflecting what the PPC might look like if new cooking technology is invented to speed up production in both industries.