**Production Possibilities Frontier Problem Sets**

The following table is a schedule for the production possibilities for a company that can produce textbooks or novels:

**Production Alternatives**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Products** | **A** | **B** | **C** | **D** | **E** |
| **Novels**  | **0** | **40** | **70** | **90** | **100** |
| **Textbooks** | **4** | **3** | **2** | **1** | **0** |

1. Graph the data above. Put **Novels** on the vertical axis and **Textbooks** on the horizontal axis. Make sure to label each point a-e.

2. The opportunity cost of increasing production of textbooks from 0 to 1 is the loss of \_\_\_\_ novels

3. The opportunity cost of increasing production of textbooks from 1 to 2 is the loss of \_\_\_\_ novels.

4. The opportunity cost of increasing production of textbooks from 2 to 3 is the loss of \_\_\_\_ novels.

5. The opportunity cost of increasing production of textbooks from 3 to 4 is the loss of \_\_\_\_ novels.

6. Explain why the answers from numbers 2 through 5 are different.

7. Suppose a new technology was increasing the efficiency of **novel** production, with no application to the production of textbooks. Illustrate on the original graph how we would represent this change in production possibilities. **Label this shift as F.**

8. Suppose that a hurricane resulted in a 50% reduction in paper output (which is a key resource in the production of novels and textbooks). Illustrate on the original graph how we would represent this change in production possibilities. **Label this shift as G.**