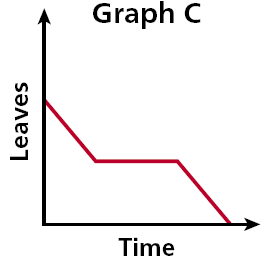
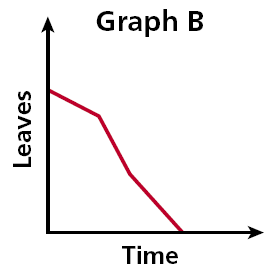
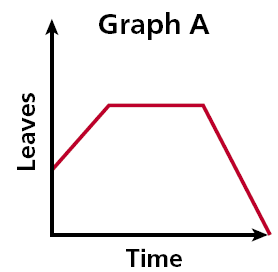
GRAPHING RELATIONS AND FUNCTIONS

A relationship between variables is often shown as a continuous graph. This relationship can be increasing, decreasing, or constant. When reading a graph, we always read from left to right.

|  |  |
| --- | --- |
| Increasing      The two segments are increasing at different rates.  What words could describe the rate of increase of the first segment?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  What words could describe the rate of increase of the second segment?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Decreasing      The two segments are increasing at different rates.  What words could describe the rate of decrease of the first segment?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  What words could describe the rate of decrease of the second segment?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Constant      The segment remains constant.  How could you describe this rate of change?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Varying rates of change  1.  2.  3.  4.  5. |

1. **Each day several leaves fall from a tree. One day a gust of wind blows off many leaves. After that, the leaves gradually fall off until there are no more leaves.**

|  |  |
| --- | --- |
| **Key Words** | **Segment Description** |
| Each day several leaves fall |  |
| Wind blows off  many leaves |  |
| Gradually fall off until there are no more leaves |  |



**The air temperature increased steadily for several hours and then remained constant. At the end of the day, the temperature increased slightly before dropping sharply.**

|  |  |
| --- | --- |
| **Key Words** | **Segment Description** |
| **The air temperature increased steadily** |  |
| **then remained constant** |  |
| **temperature increased slightly** |  |

|  |  |
| --- | --- |
| **dropping sharply** |  |