Exercise 5.3.11 Worst-case Boyer-Moore Algorithm: Construct a worst-case example for the Boyer-Moore implementation in Algorithm 5.7 (which demonstrates that it is not linear-time).

Solution: Recall Boyer-Moore goes from right to left with right side being indices that are multiples of the (length of pattern)-1.

Pattern: BAA
Text: AAAAAAAAAA

This results in worst-case complexity of $O(N * M)$ where N represents size of text and M represents the size of pattern. If for each index in the text, the entire length of pattern is checked every time, then that results in $O(N * M)$ which gives us Quadratic time complexity. $\sim O(N^2)$