Which of the following are equivalent to O(N)?

1) O(N + M), where M < N/2

2) O(2N)

3) O(N + log N)

4) O(N + M)

Which of the following are equivalent to O(N)?

1) O(N + P), where P < N/2 - When P is less than half of N it is not significant enough to include, so it can be simplified to O(N)

2) O(2N) - We can drop the constant 2, leaving O(N)

3) O(N + log N) - log N is a non-dominant term, so it can be dropped, leaving us with O(N)

4) O(N + M) - Without knowing anything about N or M we are unable to simplify this further