1. *What is the order of growth of n*3 + *n*2*?*

*Answer: n*3

*What about* 1000000 *n*3 + *n*2*?*

*Answer: n*3

*What about n*3 + 1000000 *n*2*?*

*Answer: n*3

1. *What is the order of growth of* (*n*2 + *n*) · (*n* + 1)*? Before you start multiplying, remember that you only need the leading term.*

*Answer: n*3

1. *If f is in O*(*g*)*, for some unspecified function g, what can we say about af*+*b, where a and b are constants?*

*Answer: O*(*g*)

1. *If f*1 *and f*2 *are in O*(*g*)*, what can we say about f*1 + *f*2*?*

*Answer: O*(*g*)

1. *If f*1 *is in O*(*g*) *and f*2 *is in O*(*h*)*, what can we say about f*1 + *f*2*?*

*Answer: Max(O*(*g*), *O*(*h*))

1. *If f*1 *is in O*(*g*) *and f*2 *is O*(*h*)*, what can we say about f*1 · *f*2*?*

*Answer: O(gh)*