*Part one*  
Today, you set out on the task of perfecting your milk-dunking cookie recipe. All you have to do is find the right balance of ingredients.

Your recipe leaves room for **exactly 100** teaspoons of ingredients. You make a list of the remaining ingredients you could use to finish the recipe (your puzzle input) and their properties per teaspoon:

* **capacity** (how well it helps the cookie absorb milk)
* **durability** (how well it keeps the cookie intact when full of milk)
* **flavor** (how tasty it makes the cookie)
* **texture** (how it improves the feel of the cookie)
* **calories** (how many calories it adds to the cookie)

You can only measure ingredients in whole-teaspoon amounts accurately, and you have to be accurate so you can reproduce your results in the future. The total score of a cookie can be found by adding up each of the properties (negative totals become 0) and then multiplying together everything **except calories.**

For instance, suppose you have these two ingredients:

Butterscotch: capacity -1, durability -2, flavor 6, texture 3, calories 8

Cinnamon: capacity 2, durability 3, flavor -2, texture -1, calories 3

Then, choosing to use 44 teaspoons of butterscotch and 56 teaspoons of cinnamon (because the amounts of each ingredient must add up to 100) would result in a cookie with the following properties:

* A capacity of 44\*-1 + 56\*2 = 68
* A durability of 44\*-2 + 56\*3 = 80
* A flavor of 44\*6 + 56\*-2 = 152
* A texture of 44\*3 + 56\*-1 = 76

Multiplying these together (68 \* 80 \* 152 \* 76, ignoring calories for now) results in a total score of  62842880, which happens to be the best score possible given these ingredients. **If any properties had produced a negative total, it would have instead become zero, causing the whole score to multiply to zero.**

Given the ingredients in your kitchen and their properties, what is the total score of the **highest-scoring** cookie you can make?

***Part two***What is the total score of the highest scoring cookie that has **exactly 500 calories?**