

Hiking

Input File: hiking.txt

You are going on a hike on Mount Rainier. Unfortunately, you have an old backpack that only can carry 20 pounds worth of equipment. Your job is to decide which items to bring along to maximize the value of things you are bringing in your backpack.

Input:

An integer N, representing the number of following cases. For each case, there will be five lines, each representing an object. Each line will contain two numbers: the first being the weight of the object and the second being the value of the object.

Output:

The highest total value of all the objects you can put in your backpack without going over the 20 pound weight limit.

Example Input:

```
2
5 6
10 11
3 2
7 4
4 5

12 2
5 12
7 7
4 2
8 9
```

Example Output:

```
22
28
```