1465 Maximum Area of a Piece of Cake after Horizontal and Vertical cuts

Get the maximum value of difference between horizontal cuts. Let it be a.

Get the maximum value of difference between vertical cuts. Let it be b.

Answer is a x b.

The stuff this question teaches is division by 10^9+7. In these cases, it is best to use long long everywhere.

CODE

```
int maxArea (int h, int w, vector<int> horizontalCuts,
                           vector<int> verticalCuts) {

    int maxwidth = 0;
    int maxheight = 0;
    horizontalCuts.push_back(0);
    horizontalCuts.push_back(h);
    verticalCuts.push_back(0);
    VerticalCuts.push_back(w);

    sort(horizontalCuts.begin(), horizontalCuts.end());
    sort(verticalCuts.begin(), verticalCuts.end());
```

```
for (int i = 1 ; i < horizontalCuts.size(); i++) {
        maxWidth = max(maxWidth,
                       horizontalCuts[i] -
                       horizontalCuts[i-1]);
    }

for (int i=1 ; i < verticalCuts.size() ; i++){
        maxHeight = max(maxHeight,
                        verticalCuts[i] - VerticalCuts[i-1]);
    }

~~int a = max~~
int m = 1e9 + 7;
return ((long) maxWidth % m * long(maxHeight)
                                    % m) % m;
}
```