

Given an integer array `nums`, *find three numbers whose product is maximum and return the maximum product.*

Example 1:

Input: `nums = [1,2,3]`

Output: 6

Example 2:

Input: `nums = [1,2,3,4]`

Output: 24

Example 3:

Input: `nums = [-1,-2,-3]`

Output: -6

Constraints:

- $3 \leq \text{nums.length} \leq 10^4$
- $-1000 \leq \text{nums}[i] \leq 1000$

Solution:

```
class Solution {
    public int maximumProduct(int[] nums) {
        Arrays.sort(nums);
        int n=nums.length;
        int ans=Math.max(nums[0]*nums[1]*nums[n-1],nums[n-1]*nums[n-2]*nums[n-3]);
        return ans;
    }
}
```