# Problem F
## Hans Vick

Hans Vick is a legendary assassin that is out for vengeance after the son of a certain gang leader raided his home. The plan is simple: infiltrate the enemy's hideout, knocking out every goon he runs across with his sleep dart gun.

After breaking into the top floor of the hideout where the gang's leader resides, Hans Vick realizes that he's been swapping magazines even if he hasn't used up every dart in a magazine. While some magazines might be totally empty, others might still have quite a bit left in them.

Being the god-like assassin that he his, he only ever needs one shot to knockout an enemy, and the only time Hans Vick can take any damage to his $h$ health points is when he reloads. In fact, he is so good that for every reload he does, he will always only ever take a fixed $d$ amount of damage to his health points.

Given the number of remaining darts in each of his $m$ magazines, how many enemies will Hans Vick be able to take out before having to retreat, assuming there will always be an infinite number of enemies to knockout? Hans Vick's gun will always start with the magazine that will ensure the optimal number of downed enemies.

Hans Vick must retreat the moment he runs out of ammo or his health points are ever reduced to or below 0.

### Input

The first line contains three integers $1 \leq h \leq 10^6, 0 \leq d \leq 10^6$, and $0 \leq m \leq 10^6$.

The next line contains $m$ integers where the $i$-th integer is the number of remaining darts in the $m_i$-th magazine where $0 \leq m_i \leq 30$.

### Output

Output the maximum number of enemies Hans Vick can knockout before having to retreat.

| Sample Input | Sample Output |
|---|---|
| 20 5 5<br>30 0 15 3 22 | 70 |

| Sample Input | Sample Output |
|---|---|
| 13 15 3<br>7 24 18 | 24 |