

--- Day 17: Trick Shot ---

For the probe to successfully make it into the trench, the probe must be on some trajectory that causes it to be within a **target area** after any step. The submarine computer has already calculated this target area (your puzzle input). For example:

```
target area: x=20..30, y=-10..-5
```

One initial velocity that **doesn't** cause the probe to be within the target area after any step is `17,-4`:

If you're going to fire a highly scientific probe out of a super cool probe launcher, you might as well do it with style. How high can you make the probe go while still reaching the target area?

What is the highest  $y$  position it reaches on this trajectory?

Your puzzle answer was 2701.

--- Part Two ---

To get the best idea of what your options are for launching the probe, you need to find **every initial velocity** that causes the probe to eventually be within the target area after any step.

How many distinct initial velocity values cause the probe to be within the target area after any step?

Both parts of this puzzle are complete! They provide two gold stars: \*\*

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