Let $A \subseteq \{1, 2, ..., n\} \times \{1, 2, ..., m\}$ such that:

$$\forall x, y \in A : \nexists \lambda \in \mathbb{R} : x = \lambda y$$

What is the maximum possible size of A given n, m?

Sample input:

2 2

Sample output:

3

BONUS: what if vectors in A were 3-dimensional?