# Rohit and Ayush

## Problem Statement:

Rohit and Ayush are two friends. They often fight against each other and decide the winner using their mathematical skills.
The one to calculate the gcd of two mersenne numbers quickly becomes the winner. A mersenne number is a number of the form $M_n = 2^n - 1$ where n is a natural number.
Rohit has observed that since the last few fights, Ayush has always been winning and has decided to figure out a strategy to win at any cost this time.
Help Rohit win.

## Input Format:

The first line contains **N** , the number of times Rohit and Ayush fight. The next N lines contain **2** space separated integers denoting **n** and **m**.

## Output Format:

For each test case, print the gcd of the two mersenne numbers $2^n - 1$ and $2^m - 1$ on a separate line.

## Constraints:

- **$1 \leq N \leq 10^5$**
- **$0 \leq n, m \leq 10^3$**

## Sample Input:

**3**

**2 5**

**4 8**

**3 6**

## Sample Output:

**1**

15

7