

Knight Moves

The following problem requires you to determine whether a particular cell **(M, N)** is reachable in **less than or equal to K** moves. As a reminder a knight moves in an L-shaped fashion, that is, two vertical cells and one horizontal cell, or one vertical cell and two horizontal cells. The knight is originally placed at (1,1).

A chessboard is of dimensions 8x8.

Input format

The only line of input consists of three space separated integers - **M, N, K**.

Output format

Output "YES" (without quotes) if the cell is reachable else "NO" (without quotes).

Sample Input

3 6 3

Sample Output

YES

Time limit

1 second