You are given two jugs with capacities x liters and y liters. You have an infinite water supply. Return whether the total amount of water in both jugs may reach target using the following operations:

* Fill either jug completely with water.
* Completely empty either jug.
* Pour water from one jug into another until the receiving jug is full, or the transferring jug is empty.

**Example 1:**

**Input:** x = 3, y = 5, target = 4

**Output:** true

**Explanation:**

Follow these steps to reach a total of 4 liters:

1. Fill the 5-liter jug (0, 5).
2. Pour from the 5-liter jug into the 3-liter jug, leaving 2 liters (3, 2).
3. Empty the 3-liter jug (0, 2).
4. Transfer the 2 liters from the 5-liter jug to the 3-liter jug (2, 0).
5. Fill the 5-liter jug again (2, 5).
6. Pour from the 5-liter jug into the 3-liter jug until the 3-liter jug is full. This leaves 4 liters in the 5-liter jug (3, 4).
7. Empty the 3-liter jug. Now, you have exactly 4 liters in the 5-liter jug (0, 4).

Reference: The [Die Hard](https://www.youtube.com/watch?v=BVtQNK_ZUJg&ab_channel=notnek01) example.

**Example 2:**

**Input:** x = 2, y = 6, target = 5

**Output:** false

**Example 3:**

**Input:** x = 1, y = 2, target = 3

**Output:** true

**Explanation:** Fill both jugs. The total amount of water in both jugs is equal to 3 now.

**Constraints:**

* 1 <= x, y, target <= 103