**8.Validity Checker**

Write a program that receives a total of 4 parameters in the format **x1, y1, x2, y2.** Check if the distance between each point (**x, y**) and the beginning of the Cartesian coordinate system (**0, 0**) is **valid**. A distance between two points is considered **valid** if it is an **integer value**.

A picture containing chart

Description automatically generated**Note:** You can use the following formula to help you calculate the distance between the points (**x1, y1**) and (**x2, y2**).

The order of comparisons should always be first **{x1, y1}** to **{0, 0}**, then **{x2, y2}** to **{0, 0}** and finally **{x1, y1}** to **{x2, y2}**.

In case a distance is valid, print: **`**{x1, y1} to {x2, y2} is valid**`**

If the distance is invalid, print: **`**{x1, y1} to {x2, y2} is invalid**`**

The **input** consists of two points given as **4 numbers**.

For each comparison print either **`**{x1, y1} to {x2, y2} is valid**`** if the distance is valid, or **`**{x1, y1} to {x2, y2} is invalid**`** if it is invalid.

**Examples**

|  |  |
| --- | --- |
| **Input** | **Output** |
| **3, 0, 0, 4** | **{3, 0} to {0, 0} is valid**  **{0, 4} to {0, 0} is valid**  **{3, 0} to {0, 4} is valid** |
| **2, 1, 1, 1** | **{2, 1} to {0, 0} is invalid**  **{1, 1} to {0, 0} is invalid**  **{2, 1} to {1, 1} is valid** |