



TRAINING PROBLEM 1 – ARITHMETIC PROGRESSIONS

Write a program that will read 3 numbers and determine whether they form an arithmetic progression. Recall that an arithmetic progression of n terms can be written in the form: $a, a+b, a+2b, \dots a+(n-1)b$.

INPUT FORMAT

Input consists of a series of one or more lines, each containing 3 integers in the range -30,000 to 30,000, separated by single spaces. The end of the input is indicated by a '0' on a line by itself.

SAMPLE INPUT:

```
10 11 12
10 11 13
-10 0 10
20 19 18
0
```

OUTPUT FORMAT

Output consists of a series of lines, one for each of input line. Each line consists of the corresponding 3 input numbers, followed by one of the words 'yes' (all lowercase) or 'NO' (all uppercase) as appropriate, all items separated by single spaces.

SAMPLE OUTPUT:

```
10 11 12 yes
10 11 13 NO
-10 0 10 yes
20 19 18 yes
```