MAGIC CIRCLE:

U ARE GIVEN A CIRCLE CENTRE AND SQUARE OF THE RADIUS OF THE CIRCLE. U ARE GIVEN SINGLE SETS OF POINT.

THE CIRCLE IS MAGIC CIRCLE IF THE GIVEN POINT LIES IN INTERIOR REGION OF THE CIRCLE.

CHECK WHETHER IT IS A MAGIC CIRCLE OR NOT.

IF IT IS A MAGIC CIRCLE PRINT “YES” ELSE PRINT “NO”.

INPUT :

FIRST LINE CONSISTS OF NO. TEST CASES.

SECOND LINE CONSISTS CENTRE, RADIUS OF CIRCLE, N.

THIRD LINE CONSISTS OF SINGLE SET OF POINTS.

OUTPUT:

output a line ”YES” else “NO”.

NOTE : inputs can be of float types.

SAMPLE INPUT:

1

2 3 2 1

2 4

SAMPLE OUTPUT:

YES