

Moving circle vs static line segment problems and solutions

Problem:

We have the following line segment:

LNS[P0(62, 10) , P1(-64, 7)]

We have the following circle:

CIRCLE[B_s(-235, 88) , R = 15]

Moving in this game loop with a vector V(100,-50). (where V is the vector B_sB_e)

You need to test if CIRCLE will collide with LNS.

If there is collision, what would the position B_i of the circle be at intersection time?

If any intersection, consider a bouncy circle, what would the final position of the circle be, after collision and reflection?