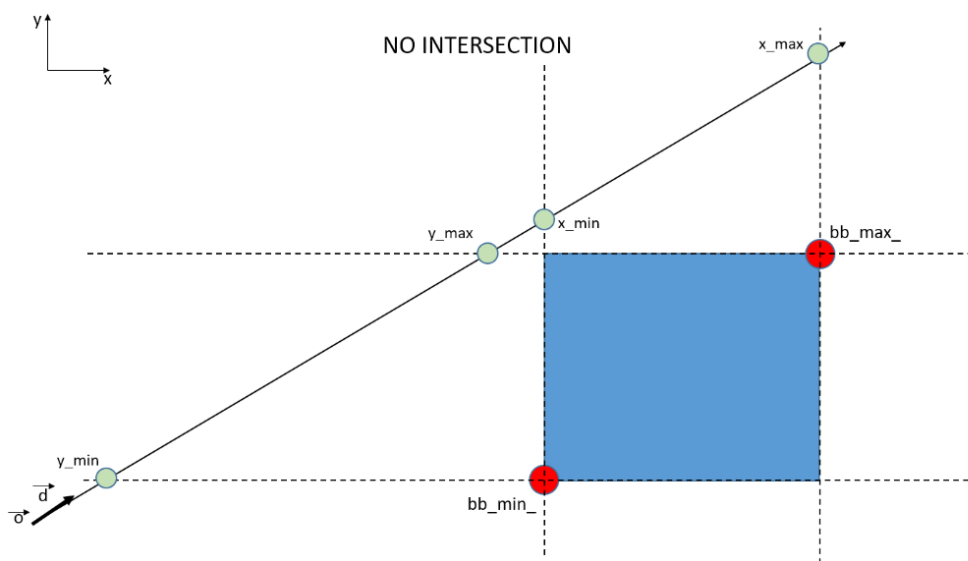


- x-direction calculated first and therefore values stored as  $min\_t\_possible = x\_min$  and  $max\_t\_possible = x\_max$
- now y-direction calculated and as  $x\_min > y\_min$  we do not change the  $min\_t\_possible$
- as  $x\_max > y\_max$  we change  $max\_t\_possible = y\_max$
- as  $min\_t\_possible < max\_t\_possible$  there is an intersection



- x-direction calculated first and therefore values stored as  $min\_t\_possible = x\_min$  and  $max\_t\_possible = x\_max$
- now y-direction calculated and as  $x\_min > y\_min$  we do not change the  $min\_t\_possible$
- as  $x\_max > y\_max$  we change  $max\_t\_possible = y\_max$
- as  $min\_t\_possible > max\_t\_possible$  there is not an intersection