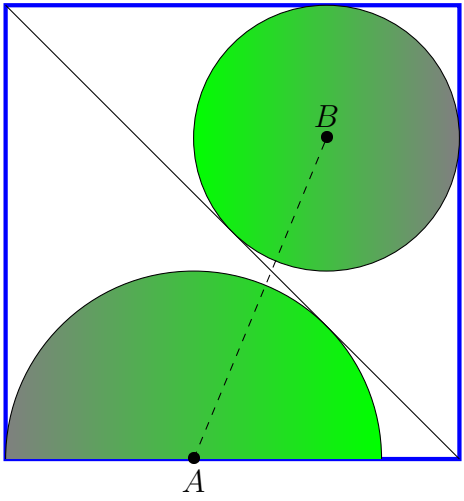
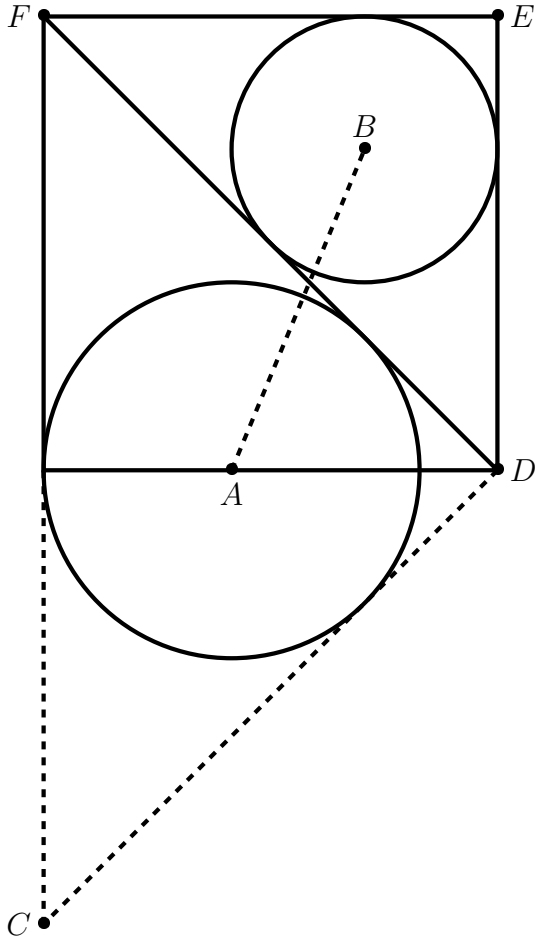


Given a square figure, with sides of 12 units of length, calculate the distance $\overline{AB}$. The alternative configuration indicates that the problem is reduced to calculating the incenters $A = (h_a, k_a)$ and $B = (h_b, k_b)$, origin of each inscribed triangle, and calculating the distance between them.



This type of problem is difficult to solve algebraically, and few tools allow you to intuitively calculate the incenters as well as VBAexpressions does. The solution involves only the identification of the triangles involved:

- Upper triangle $\overline{DEF}$
- Lower triangle $\overline{FCD}$

Then, for any square of sides s, with VBA Expressions we can compute the distance of the centers for the inscribed semicircle and circle with the diagonal as a common tangent to both elements as follows: assign the variable s, assign the points that define both triangles, compute the incenters and compute the distance between both points. For $s = 12$ the returned value obtained with VBA Expressions is 9.1844, value that we can check graphically with tools such as GeoGebra.