Lines and Planes

Question

For the plane $y = x$, rank the following quantities in order from smallest to largest.

I. The distance from $(1, 0, 0)$ to the plane.

II. The distance from $(-1, 1, 0)$ to the plane.

III. The distance from $(1, 1, 2)$ to the plane.

A. I < II < III

B. I = II < III

C. III < I < II

D. III < I = II

E. None of these.