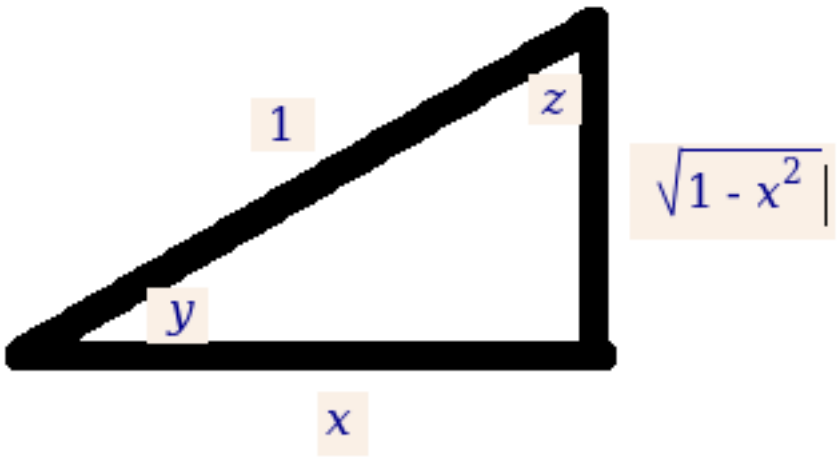

Okay sorry for the terrible diagram. Hopefully you have something similar.

$y = \arccos x \Rightarrow x = \cos y$

Right-angled triangle $\therefore z = \frac{\pi}{2} - y$, but of course because the hyp. is 1 we can just say that $z = \arcsin x$

So $\arcsin x = \frac{\pi}{2} - y$, and thus $\arccos x + \arcsin x = y + \left(\frac{\pi}{2} - y\right) = \frac{\pi}{2}$:)

Hope that helps. I think this is a really nice question.