

1: Let \mathbb{R} with the usual topology prove that the interval (a, b) homeomorphic to the ~~set~~ set $\{(x, y) : y - x = 4\}$

2: Let \mathbb{R} with the usual topology prove that

$(-1, 1)$ homeomorphic to $\{(x, y) : y = \sqrt{1-x^2}\}$.

البيان (1) هو (2) (1) في البداية

3: Prove that $[1, 2] \cong (-4, -2]$ with the usual subspaces.
 \downarrow
 homeomorphic