

Solution to Homework 7

Question. What is the squared distance $D^2(a, b)$ between the points $a = (1, 2, 3)$ and $b = (-1, -2, -3)$?

Solution.

$$D^2(a, b) = (1 - (-1))^2 + (2 - (-2))^2 + (3 - (-3))^2 = 2^2 + 4^2 + 6^2 = 4 + 16 + 36 = 56.$$