
Warm-Up: A Familiar Concept

Prepared by Mark on June 5, 2026

Problem 1:

Let $v = [-5, -2, 0, 1, 4, 1000]$. Find all x that minimize the following metric:

$$\sum_{\forall i} |v_i - x| = |v_1 - x| + |v_2 - x| + \dots + |v_6 - x|$$

Problem 2:

Let $v = [-5, -2, 0, 1, 4, 1000, 1001]$. Find all x that minimize the metric in the previous problem.

Problem 3:

What is this metric usually called?