

Distance Metrics: Euclidean vs Manhattan

$$d_{Eucl} = \sqrt{\sum(x_i - y_i)^2}$$
$$d_{Manh} = \sum|x_i - y_i|$$

Y coordinate

5

4

3

2

1

0

X coordinate

A

B

3 units

4 units

Point A (1, 1)

Point B (5, 4)

Euclidean: 5.00

Manhattan: 7