

# 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

2

3

4

5

6

7

X coordinate

A

B

4 units

3 units

- Point A (1, 1)
- Point B (5, 4)
- Euclidean: 5.00
- Manhattan: 7

