



training part = {1, 2, 3, 6}

testing part = {6, 7, 10, 11}

Euclidean distance

$$d = \sqrt{(w - w_i)^2}$$

$$d = \sqrt{(7 - 6)^2} = 1$$

$$d = \sqrt{(10 - 6)^2} = 4$$

$$d = \sqrt{(11 - 6)^2} = 5$$

## Confusion Matrix

	Positive	Negative
Positive	TP = 3	FP = 1
Negative	FN = 2	TN = 2

$$\text{Accuracy} = \frac{TP + TN}{TP + TN + FP + FN}$$

$$= \frac{3 + 2}{3 + 2 + 1 + 2}$$

$$= \frac{5}{8} = 0.625$$

$$\text{Sensitivity} = \frac{TP}{TP + FN} = \frac{3}{3 + 2} = \frac{3}{5} = 0.6$$

$$\text{Specificity} = \frac{TN}{FP + TN} = \frac{2}{1 + 2} = \frac{2}{3} = 0.66$$