Quiz 9.1 , 9.2

Actual class	Predicted class
N	N
P	P
P	N
P	P
N	P
N	N
N	P
P	N
P	P
P	P

Example of Confusion Matrix

	buys - yes	buys - no	
buys - yes	4 PP	2 PN	6
buys - no	2 NP	2 NN	4
	6	4	10

Accuracy   TP + TN / P ll   = $\frac{4 + 2}{10} = \frac{6}{10}$ ✗

Quiz 9.3 , 9.4 , 9.5 , 9.6

9.3

P = Precision = $\dfrac{TP}{TP + FP}$ = $\dfrac{4}{4 + 2}$ = 0.66

9.4

R = Recall = $\dfrac{TP}{TP + FP}$ = $\dfrac{4}{4 + 2}$ = 0.66

9.5

sensitivity = TP / P = 4 / 6 = 0.66

9.6 Specifity = TN / N = 2 / 4 = 0.5

F1 - Measure

F_1 = $\dfrac{2 \, PR}{P + R}$ = $\dfrac{2 \, (0.66 \times 0.66)}{0.66 + 0.66)}$ = 0.62