1. simple explanation (binary classification)

		Predicted	
		Negative	**Positive**
Actual	**Negative**	True Negative	False Positive
	Positive	False Negative	True Positive

1.1

Precision

Great! Now let us look at Precision first.

$$\text{Precision} = \frac{True\ Positive}{True\ Positive + False\ Positive}$$

What do you notice for the denominator? The denominator is actually the Total Predicted Positive! So the formula becomes

		Predicted	
		Negative	**Positive**
Actual	**Negative**	True Negative	False Positive
	Positive	False Negative	True Positive

True Positive + False Positive = Total Predicted Positive

1.2

Recall

So let us apply the same logic for Recall. Recall how Recall is calculated.

$$\text{Recall} = \frac{True\ Positive}{True\ Positive + False\ Negative}$$

$$= \frac{True\ Positive}{Total\ Actual\ Positive}$$

		Predicted	
		Negative	**Positive**
Actual	**Negative**	True Negative	False Positive
	Positive	False Negative	True Positive

True Positive + False Negative = Actual Positive

1.3

F1 Score

Now if you read a lot of other literature on Precision and Recall, you cannot avoid the other measure, F1 which is a function of Precision and Recall. Looking at Wikipedia, the formula is as follows:

$$\text{F1} = 2 \times \frac{Precision * Recall}{Precision + Recall}$$

1.4

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

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