Idea del Clasificador de Naïve Bayes (Solución del Reto)

Paso 2

#4 Probabilidad a Posteriori

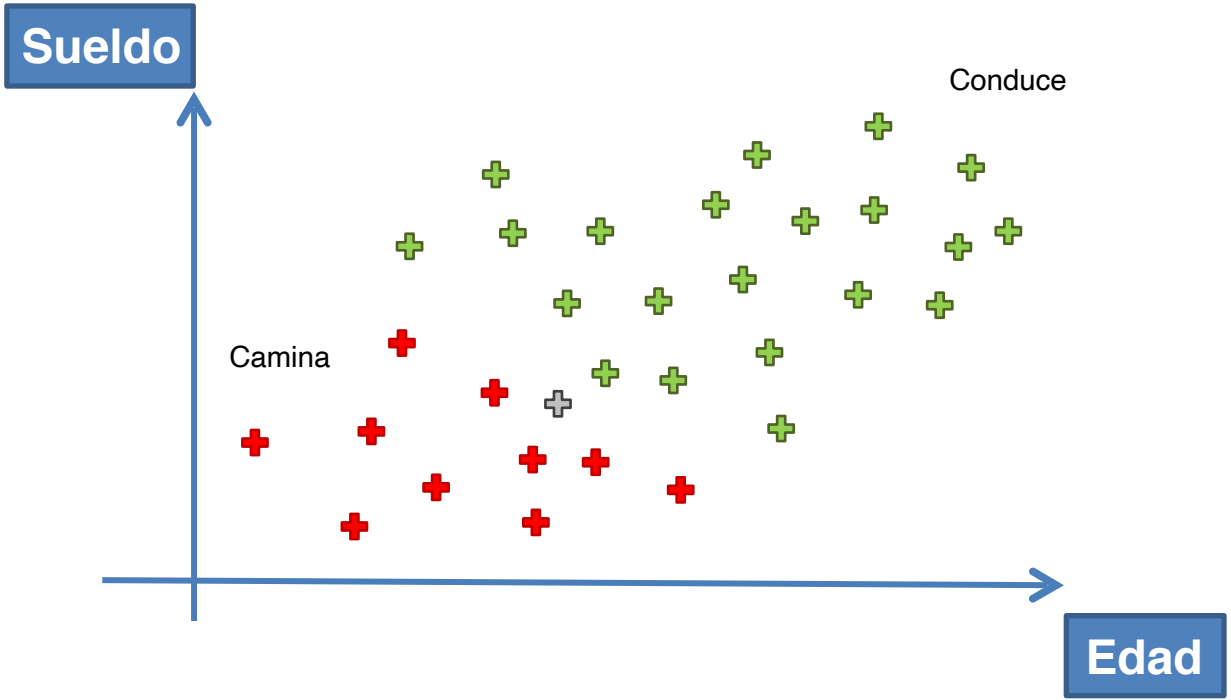
#3 Probabilidad Condicionada

#1 Probabilidad a Priori

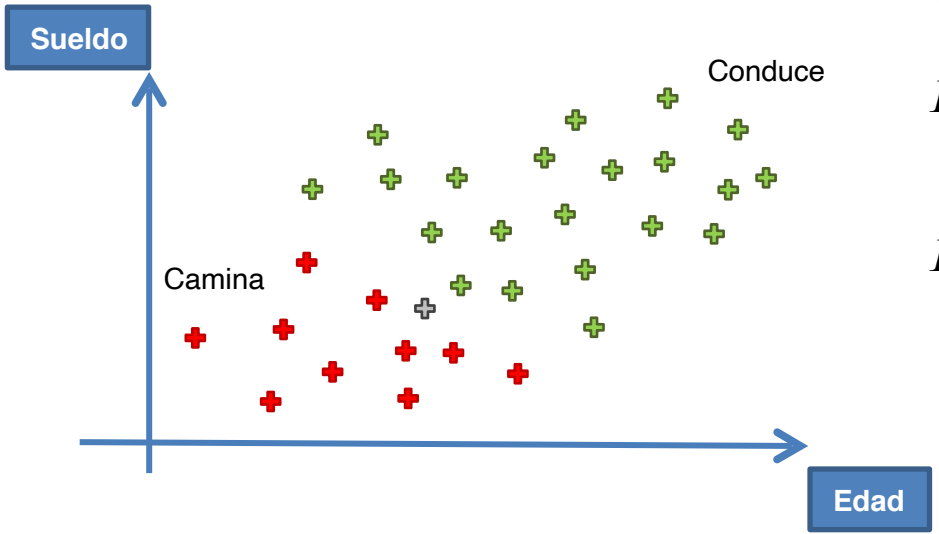
$$P(Drives \mid X) = \frac{P(X \mid Drives) * P(Drives)}{P(X)}$$

#2 Probabilidad Marginal

Naïve Bayes: Paso 2



Naïve Bayes: Paso 2

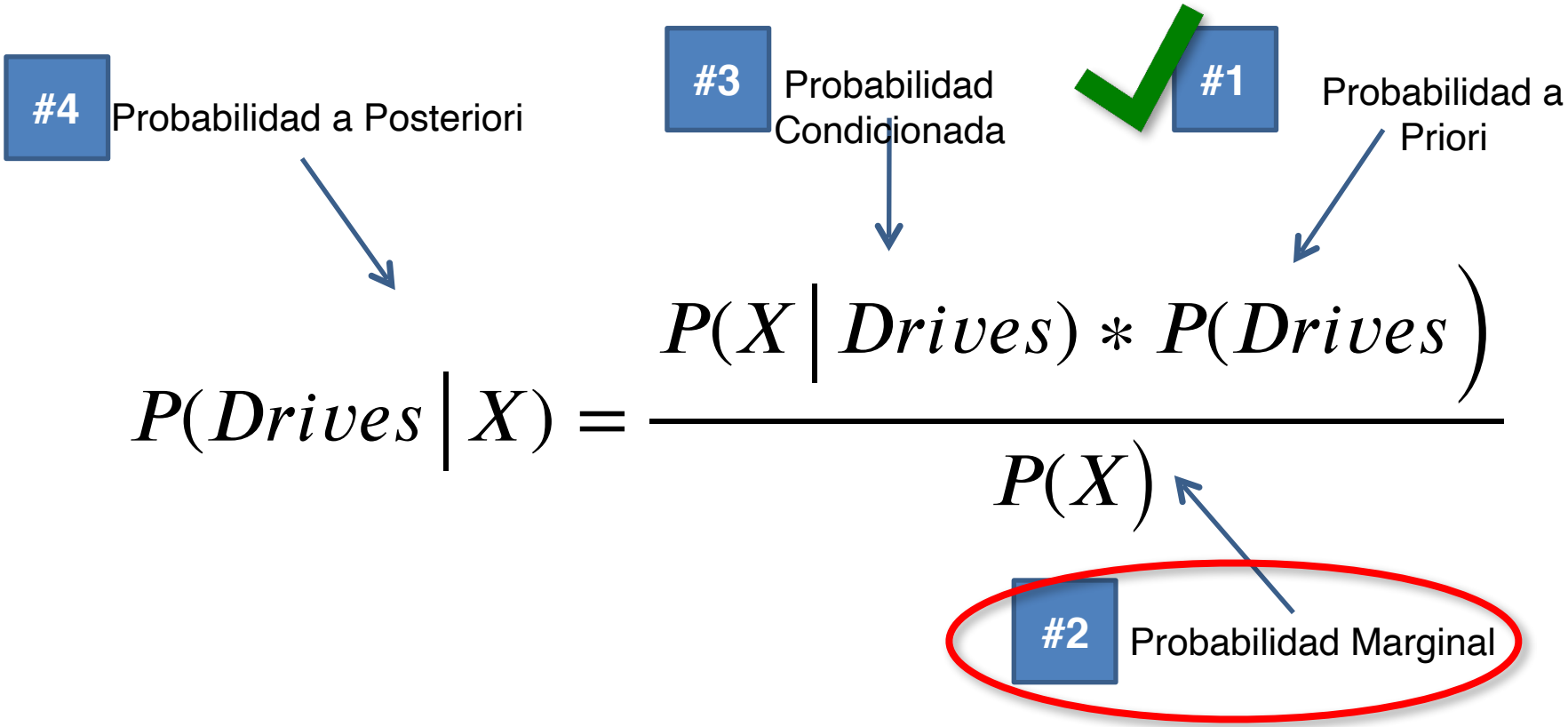


#1. P(Conduce)

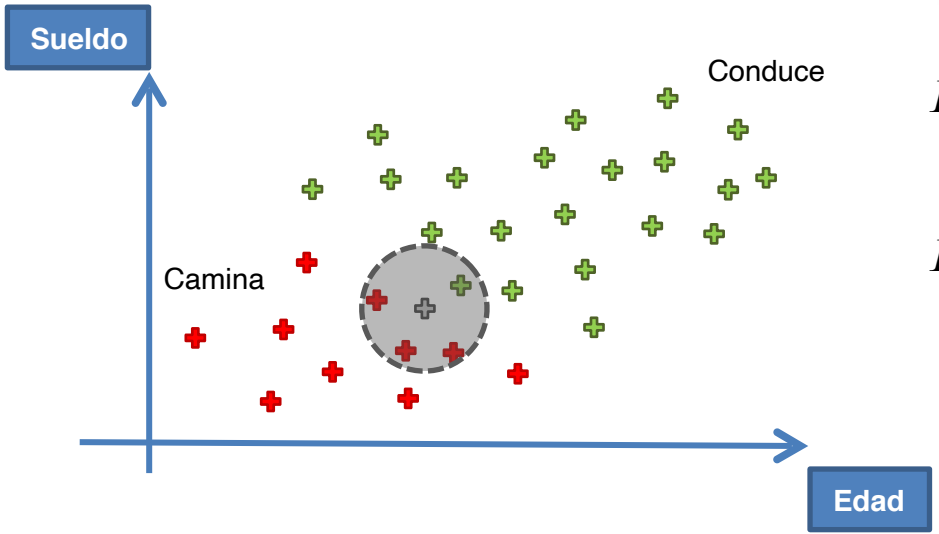
$$P(Drives) = \frac{Number\ of\ Drivers}{Total\ Observations}$$

$$P(Drives) = \frac{20}{30}$$

Naïve Bayes: Paso 2



Naïve Bayes: Paso 2

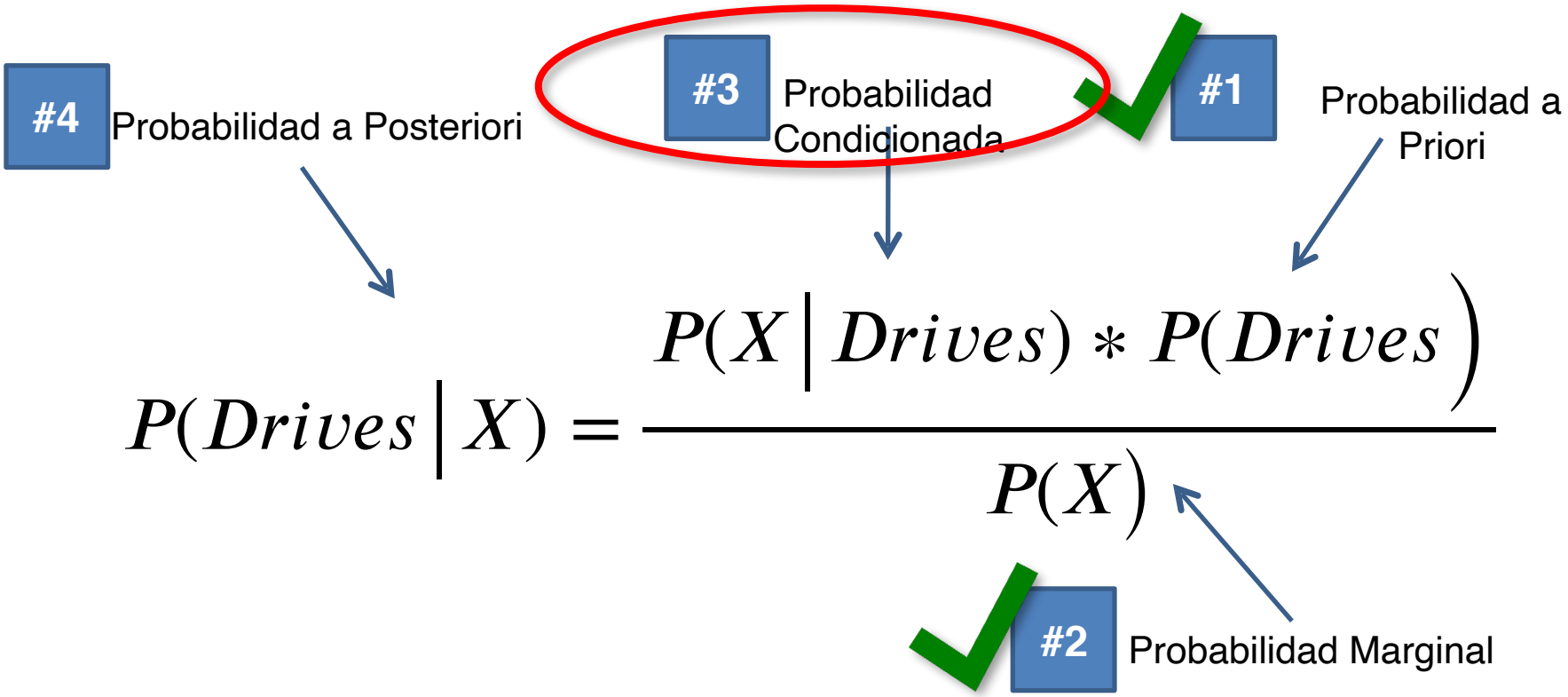


#2. P(X)

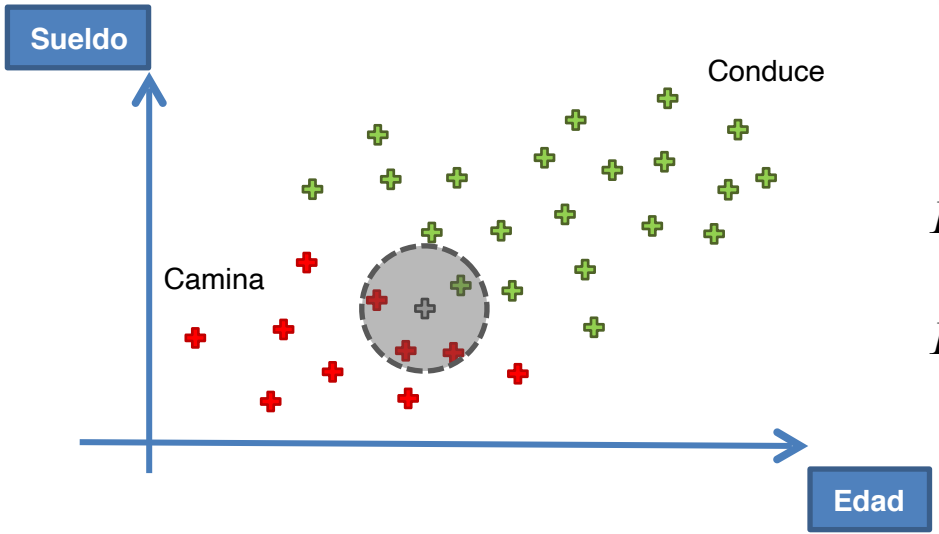
$$P(X) = \frac{Number\ of\ Similar\ Observations}{Total\ Observations}$$

$$P(X) = \frac{4}{30}$$

Naïve Bayes: Paso 2



Naïve Bayes: Paso 2

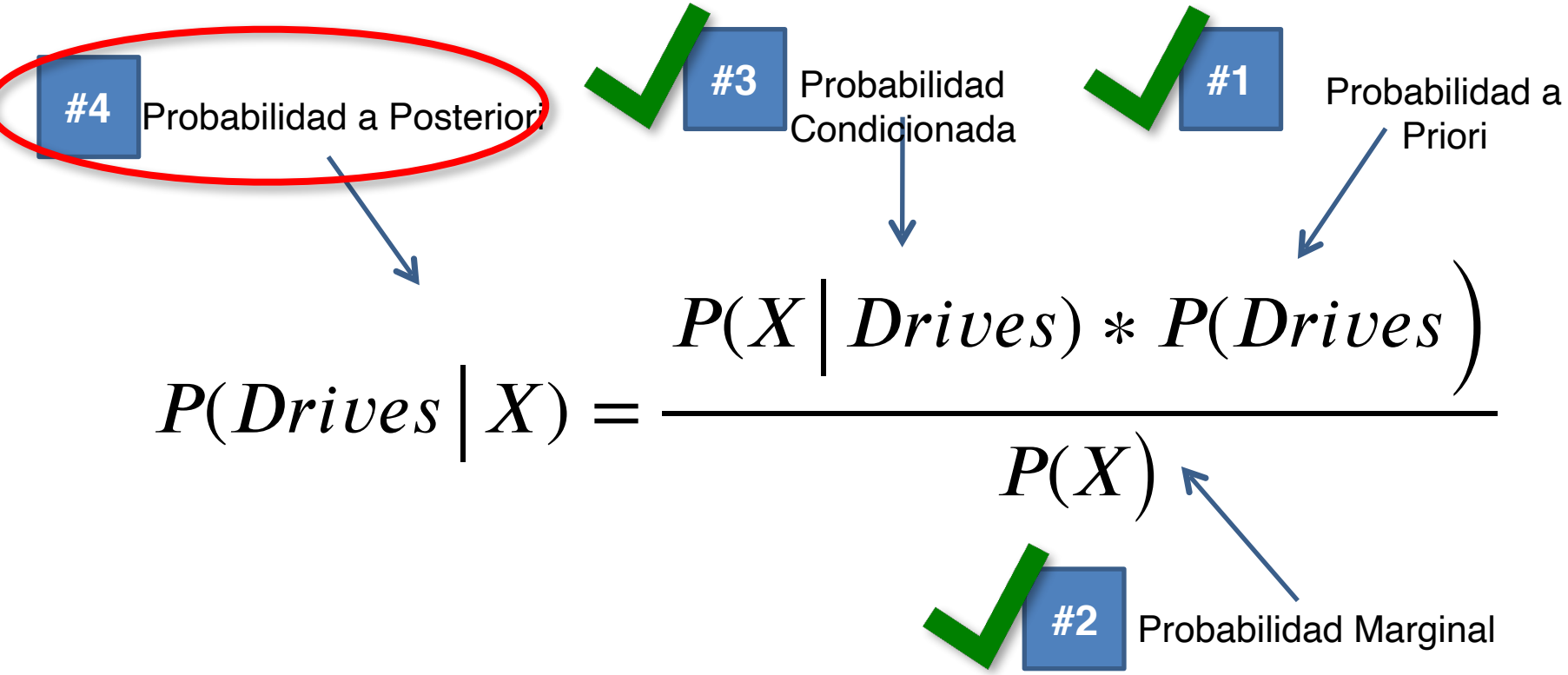


#3. P(X|Conduce)

$$P(X \mid Drives) = \frac{Number\ of\ Similar\ Observations\ Among\ those\ who\ Drives}{Total\ number\ of\ Drivers}$$

$$P(X \mid Drives) = \frac{1}{20}$$

Naïve Bayes: Paso 2



Naïve Bayes: Paso 2

#4 Probabilidad a Posteriori

#3 Probabilidad Condicionada

#1 Probabilidad a Priori

$$P(Drives \mid X) = \frac{\frac{1}{20} * \frac{20}{30}}{\frac{4}{30}} = 0.25$$

#2 Probabilidad Marginal

Naïve Bayes

Paso 2 – Fin.