$$P(x \mid w_1) = N(\mu_1, \xi_1), \qquad P(x \mid w_2) = N(\mu_2, \xi_2)$$

$$\mu_1 = \begin{pmatrix} 3 \\ 3 \end{pmatrix} \qquad \xi_1 = \begin{pmatrix} 1, 2 & -0, 4 \\ -0, 4 & 1, 2 \end{pmatrix}$$

$$\mu_2 = \begin{pmatrix} 6 \\ 6 \end{pmatrix} \qquad \xi_2 = \begin{pmatrix} 1, 2 & 0, 4 \\ 0, 4 & 1, 2 \end{pmatrix}$$

$$\frac{P(w_1|x) = P(w_2|x) \Leftrightarrow P(w_1) P(x)}{P(x|w_1)} = \frac{P(w_2)}{P(w_1)} \iff$$

$$\frac{P(w_1|x) = P(w_2|x) \rightleftharpoons P(w_1) P(y_1)}{P(x|w_2)} = \frac{P(w_2)}{P(w_1)} \stackrel{(=)}{\longleftarrow}$$

$$\frac{P(x|w)}{P(x|v_2)} = \frac{P(w_2)}{P(w_1)} \langle = \rangle$$

$$\frac{P(x|w)}{P(x|v_2)} = \frac{P(w_2)}{P(w_1)} \stackrel{(=)}{=}$$

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$$\frac{P(x|w)}{P(x|w)} = \frac{P(w)}{P(w)} =$$

$$\frac{P(x|w)}{P(x|v_2)} = \frac{P(w_2)}{P(w_1)} =$$

$$\frac{1}{\left(\frac{1}{x^{2}}\right)} e^{xp} \left(-\frac{1}{x^{2}}\left(x-y_{1}\right)^{T}\right)^{T}$$

$$\frac{1}{\sqrt{|z_i|}} \exp\left(-\frac{1}{2}(x-\mu_i)^{\mathsf{T}} \sum_{i=1}^{-1} (x-\mu_i)^{\mathsf{T}} \sum_{i=1}^{-1} (x$$

$$\ln \left(\frac{\frac{1}{2 \sqrt{131}} \exp(-\frac{1}{2}(x-\mu_1)^T \sum_{i=1}^{-1} (x-\mu_1))}{\frac{1}{2 \sqrt{1321}} \exp(-\frac{1}{2}(x-\mu_2)^T \sum_{i=1}^{-1} (x-\mu_2))} \right) = \ln \frac{\rho(w_2)}{\rho(w_1)} = 0$$

$$\frac{1}{||\mathbf{z}_{1}||} e^{x} p \left(-\frac{1}{2} (x-\mu_{2})^{T} \mathbf{z}^{2} (x-\mu_{2})\right)$$

$$\times p\left(-\frac{1}{2}(x-\mu_{1})^{T} \sum_{i}^{-1}(x-\mu_{i})\right) - \ln\left(\frac{1}{2 - \sqrt{13}} e^{x} p\right)$$

$$\left(n\left(\frac{1}{2n\left(\overline{z_{1}}\right)}e^{x}p\left(-\frac{1}{2}(x-\mu_{1})^{T}\sum_{i}^{-1}(x-\mu_{i})\right)\right)-\left(n\left(\frac{1}{2n\left(\overline{z_{2}}\right)}e^{x}p\left(-\frac{1}{2}(x-\mu_{2})^{T}\sum_{i}^{-1}(x-\mu_{2})\right)\right)=\\=\ln\left(\frac{\rho(\omega_{2})}{\rho(\omega_{1})}\right)$$

$$\ln\left(\frac{1}{2\pi \sqrt{15.1}}\right) - \frac{1}{2} \left(x - \mu_{0}\right)^{T} \cdot Z_{1}^{-1} \left(x - \mu_{0}\right) - \ln\left(\frac{1}{2\pi \sqrt{1591}}\right) + \frac{1}{2} \left(x - \mu_{0}\right)^{T} \cdot Z_{2}^{-1} \left(x - \mu_{0}\right) = \lim_{n \to \infty} \frac{P(n)}{P(n)}$$

= ln (Par)

$$\ln \frac{1}{2\pi \sqrt{121}} \exp($$