As we all know Probablity = $\frac{\text{Number of desired Outcome}}{\text{Total Number of outcomes}}$

Probablity of getting $y = C_1$ given x is

$$P(y = C_1 | x) = \frac{\frac{1}{\sqrt{2\pi}\,\sigma c_1} \times e^{-\frac{1 \times (x - uc_1)^2}{2 \times \sigma c_1^2}}}{\frac{1}{\sqrt{2\pi}\,\sigma c_1} e^{-\frac{1}{2} \times \frac{(x-uc_1)^2}{\sigma c_1^2}} + \frac{1}{\sqrt{2\pi}\,\sigma c_2^2} \times e^{-\frac{1}{2} \times \frac{(x-uc_2)^2}{\sigma c_2^2}}}$$

uc_1 = Mean of class c_1

uc_2 = Mean of class c_2

σc_1 = variance of class c_1

σc_2 = variance of class c_2

$$P(y = c_1 | x) = \frac{\frac{1}{\sigma c_1} \times e^{-\frac{1}{2} \frac{(x-uc_1)^2}{\sigma c_1^2}}}{\frac{1}{\sigma c_1} \times e^{-\frac{1}{2} \frac{(x-uc_1)^2}{\sigma c_1^2}} + \frac{1}{\sigma c_2} \times e^{-\frac{1}{2} \frac{(x-uc_2)^2}{\sigma c_2^2}}}$$

Now dividing it with numerator

$$P(y = c_1 | x) = \frac{1}{1 + \frac{\frac{\sigma c_1}{\sigma c_2} \times e^{-\frac{1}{2} \frac{(x-uc_2)^2}{\sigma c_2^2}}}{e^{-\frac{1}{2} \frac{(x-uc_1)^2}{\sigma c_1^2}}}}$$

$$P(y=c_1|x) = \frac{1}{1+\frac{\sigma c_1}{\sigma c_2} \times e^{\frac{1}{2}\frac{(x-\mu c_1)^2}{\sigma c_1^2} - \frac{1}{2}\frac{(x-\mu c_2)^2}{\sigma c_2^2}}}$$

Now we have equal probabilities considering equal weights

$$0.5 = \frac{1}{1+\frac{\sigma c_1}{\sigma c_2} \times e^{\frac{1}{2}\frac{(x-\mu c_1)^2}{\sigma c_1^2} - \frac{1}{2}\frac{(x-\mu c_2)^2}{\sigma c_2^2}}}$$

So $$\frac{\sigma c_1}{\sigma c_2} \times e^{\frac{1}{2}\frac{(x-\mu c_1)^2}{\sigma c_1^2} - \frac{1}{2}\frac{(x-\mu c_2)^2}{\sigma c_2^2}} = 1$$

Here we have $\sigma c_1 = \sigma c_2 = 1$

$$e^{\frac{1}{2}(x-\mu c_1)^2 - \frac{1}{2}(x-\mu c_2)^2} = 1$$

Taking Log on both side

$$\frac{1}{2}(x-\mu c_1)^2 - \frac{1}{2}(x-\mu c_2)^2 = 0$$

$$x - \mu c_1 = \pm (x - \mu c_2)$$

$$x - \mu c_1 = -(x - \mu c_2)$$

$$x = \frac{\mu c_1 + \mu c_2}{2}$$

we have $\mu c_1 = 1$ and $\mu c_2 = 2$

$$\therefore x = \frac{3}{2} = \boxed{1.5}$$

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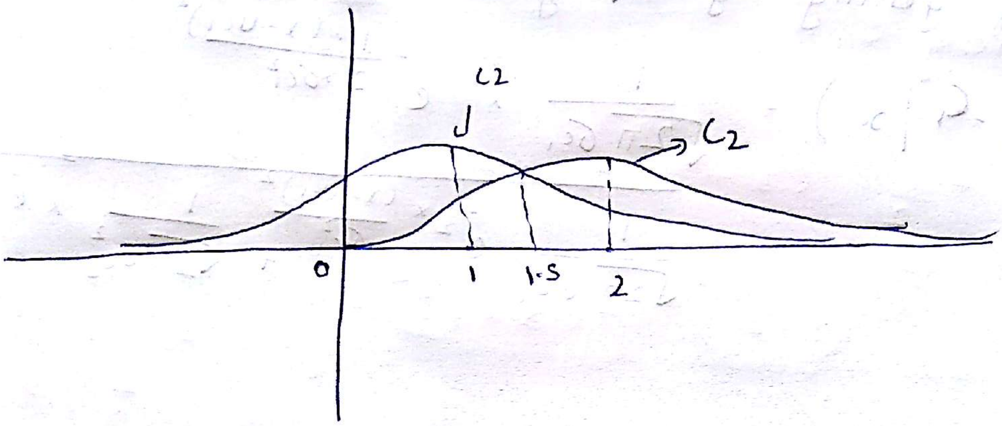
Now we have given graph from values



Now in order to calculate area we do integration

$$\text{so Accuracy} = \int_{1.5}^{\infty} \frac{1}{\sqrt{2\pi}\,\sigma_{c_2}} \times e^{-\frac{1}{2}\frac{(x-\mu_{c_2})^2}{\sigma_{c_2}^2}}$$

$\sigma_{c_2} = 1 \quad \mu_{c_2} = 2$

$$\therefore \text{Accuracy} = \int_{1.5}^{\infty} \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}(x-2)^2}$$

Now we get $\boxed{\text{Accuracy} = 0.691}$ (Approximately)

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