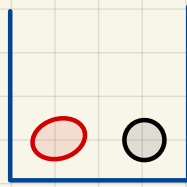


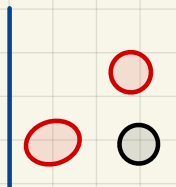
M339G: February 12th, 2024.

Inspiration.

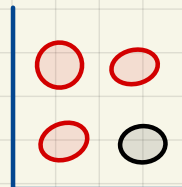
Example. Which Box?



Box #1



Box #2



Box #3

Q: $P[\text{Box } i \mid \text{Red}] = ?$

for all i

$$= \frac{P[\text{Box } i \cap \text{Red}]}{P[\text{Red}]}$$

$$\frac{\frac{1}{3} \cdot \frac{i}{i+1}}{\frac{1}{3} \left(\frac{1}{2} + \frac{2}{3} + \frac{3}{4} \right)}$$