

1) "Watch Anime now"

$$* P(\text{watch anime now} | \text{spam}) = (.095) * (.095) * (.095) \approx .0008573$$

$$P(\text{watch anime now} | \text{not spam}) = (.053) * (.053) * (.053) \approx .0001488$$

→ SPAM ←

2) "takeout and anime at my house"

$$P(\text{phrase} | \text{spam}) = (.0476) * (.095) * (.0476) * (.095) \approx .00002044$$

$$* P(\text{phrase} | \text{not spam}) = (.105) * (.053) * (.053) * (.105) \approx .00003096$$

→ NOT SPAM ←

3) "sell me your anime collection"

$$P(\text{phrase} | \text{spam}) = (.095) * (.0476) * (.095) * (.095) * (.0476) \approx 1.942 \times 10^{-6}$$

$$P(\text{phrase} | \text{not spam}) = (.053) * (.053) * (.053) * (.053) * (.053) \approx 4.181 \times 10^{-7}$$

→ SPAM ←