

Classwork

act Documents

Training

- just plain boring
- entirely predictable and lacks energy
- = no surprises and very few laughs
- + very powerful
- + the most fun film of the summer.

Test

- ? predictable with no fun

⇒ priors:-

$$P(-) = \frac{3}{5} \quad \& \quad P(+) = \frac{2}{5}$$

Conditional probabilities:-

$$P(\text{predictable} | -) = \frac{1+1}{14+20} = \frac{2}{34} \quad \boxed{\begin{matrix} 1 \\ 17 \end{matrix}}$$

$$P(\text{with } | +) = \frac{0+1}{14+20} = \frac{1}{34} \quad \boxed{\begin{matrix} 1 \\ 34 \end{matrix}}$$

$$P(\text{no } | -) = \frac{1+1}{14+20} = \frac{2}{34} \quad \boxed{\begin{matrix} 1 \\ 17 \end{matrix}}$$

$$P(\text{fun} | +) = \frac{1+1}{9+24} = \frac{2}{33} \quad \boxed{\begin{matrix} 2 \\ 33 \end{matrix}}$$

- Choosing the category:-

$$P(+ | \text{test}) = P(\text{predictable} | +) \times P(\text{with } | +) \times P(\text{no } | +) \times P(\text{fun} | +) \times P(+)$$

$$= \frac{1}{33} + \frac{1}{33} + \frac{1}{33} + \frac{2}{33} + \frac{2}{5}$$

$$= \frac{4}{33} = 67458119e^{-7} \approx 0.0000004$$

$$3929605$$

$$p(-1 \text{ test}) = \frac{1}{17} \times \frac{1}{34} \times \frac{1}{17} \times \frac{1}{34} \times \frac{3}{5}$$

$$= \frac{3}{1670420} \approx 0.000002$$

\therefore Category of test will be negative (-)