

Example :

Cart

PS

Documents

- 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

solution :

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

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

$$P(\text{with } -) = \frac{0+1}{14+20} = \frac{1}{34}$$

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

$$P(\text{fun } |-) = \frac{(0+1)}{14+20} = \frac{1}{34}$$

$$P(\text{predictable } | +) = \frac{(0+1)}{8+20} = \frac{1}{28}$$

$$P(\text{with } | +) = \frac{(0+1)}{8+20} = \frac{1}{28}$$

$$P(\text{no } | +) = \frac{(0+1)}{8+20} = \frac{1}{28}$$

$$P(\text{fun } | +) = \frac{(1+1)}{8+20} = \frac{2}{28}$$

$P(-|\text{predictable with no fun})$

$$= \frac{3}{5} \times \frac{1}{34} \times \frac{2}{34} \times \frac{1}{34} \times \frac{1}{17}$$

$$= \frac{6}{3340840} = 0.0000018$$

P(+ | predictable with no fun)

$$= \frac{2}{5} \times \frac{1}{28} \times \frac{1}{28} \times \frac{1}{28} \times \frac{1}{14}$$

$$= \frac{2}{1536640} = 0.00000013$$

Result : - predictable with no fun.