

Quiz 4 Student Mistakes

Q1:

- False
 - Argued why it shouldn't be true, but never said why it was false
 - Examples which don't work because of miscalculation
- True
 - Can't divide by 0 when doing $P(A)$ or $P(B)$ in denominator
 - Can't cancel $0/0$
 - Example where it's true doesn't prove it's true
- Both
 - Independence or correlation is irrelevant
 - Circular reasoning "Yes it is T/F because if premise then conclusion is T/F"
 - Nonsense trees
 - Incorrectly giving numerator/denominator in Bayes' Theorem

True with division by 0: $\frac{1}{2}$ point

False with nonsense explanation: $\frac{1}{2}$ point for correctly guessing false

Otherwise: 0

Q2

- Naming right probability
 - It's $P(M|+)$ not $P(M \& +)$, $P(+|M)$, or anything else
 - Say 0.99, so 0.99 \rightarrow no credit
 - Make up stuff \rightarrow no credit
- Bayes' Theorem
 - 1 point each for denominator, numerator
 - $-\frac{1}{2}$ for using 0.01 instead of 0.0001
 - $-\frac{1}{2}$ for wrong term in denominator
- Simplification
 - -1 for not simplifying
 - Percentages or decimals are not fractions
 - Remind students what integers, fractions, and reduced fractions are

Q3: True/false questions, so it's right or wrong. Nothing more to say without mind reading.