

Alt method

M1: use of eg $P(A|B) = P(A)$ or $P(B|A) = P(B)$

A1: $P(A|B) = \frac{16}{31} \neq \frac{2}{3}$ or $P(B|A) = \frac{2}{5} \neq \frac{31}{60}$ and correct conclusion

(b)

M1: use of $P(B|A') = \frac{P(B \cap A')}{P(A')}$ at least one of numerator or denominator correct

A1: cao, just 0.75 oe is M1A1

(c)

B1ft: ' $P(A)$ ' and $P(A') = 1 - P(A)$ '

B1ft: $P(B|A')$ and $P(B'|A')$ ft their (b)

M1: valid method to find $P(B|A)$ or $P(B'|A)$

A1: all correct cao