

Quiz 1 key

		Ford	
		B	B'
white	A	.1	.2
	A'	.1	.6
		.2	.8

a) $A'B$: a non-white Ford
 $P(A'B) = .1$

b) $P(A \cup B) = P(A) + P(B) - P(AB)$

or $1 - P(A'B') = 1 - .6 = .4$

c) $P(AB) \stackrel{?}{=} P(A)P(B)$

$.1 \neq (.2)(.3) = .06 \Rightarrow \text{not independent}$

d) $P(B/A) = \frac{P(AB)}{P(A)} = \frac{.1}{.3} = 1/3$

or, $P(B/A) \neq P(B)$

some people were trying to say $P(AB) = 0$ is needed for independence... NO!