Learning Objectives - Bayes' Rule

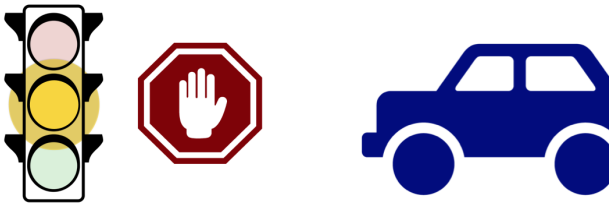
The following questions will help you review what you learned in the Bayes' Rule

Prior knowledge

For questions 1-3, assume you already have the following knowledge:

You're interested in finding out the probability of a car stopping if it sees a *yellow*

- Past data tells you that the probability of a car stopping at a traffic light int $P(S) = 0.40$.
- You also know that the past probability of a traffic light being yellow (as op is $P(Y) = 0.10$.



Car stopping at a yellow light

QUESTION 1 OF 5

When a car is stopped at an intersection, data shows that 12% of the time So if we know a car is stopped, there's a 12% chance the light is yellow. Thi *conditional probability*.

Given P(S) and P(Y) above, how would you represent this conditional proba

- P(S|Y) = 0.12
- P(S) = 0.12
- P(Y|S) = 0.12
- P(Y,S) = 0.12

QUESTION 2 OF 5

Using what you know from question 1, answer the following: if the traffic li what is the chance that the car will stop?

- 0.04