- IN TWO VARIABLE CATEGORICAL COMPARISONS; IT IS EASIER TO CONSTRUCT OUR EXPLANATIONS IN SENTENCE FORM IF THE <u>EXPLANATORY VARIABLE</u> IS IN THE DENOMINATOR.

- <u>CALCULATING PERCENTAGE CHANGE</u>

$$\frac{P(x \mid A) - P(x \mid B)}{P(x \mid B)} = \% \text{ CHANGE}$$

EXAMPLE FROM HEART ATTACK STUDY: (MODULE 15, PT 3 ^{ACTIVITY})

% CHANGE: (REDUCTION) $\dfrac{1.25\% - 2.16\%}{2.16\%} = \dfrac{-0.91}{2.16} = -0.42$

$\Rightarrow -42\%$

↳ IF ONE TAKES ASPIRIN, IT REDUCES YOUR RISK OF HEART ATTACK by 42%

(INCREASE) $= \dfrac{2.16 - 1.25}{1.25} = \dfrac{\mp 0.91}{1.25} = +0.728$ OR $^{\$}72.8\%$

↳ IF ONE DOESN'T TAKE ASPIRIN, IT INCREASES YOUR RISK OF HEART ATTACK BY ≈ 73%.

* WHICH METHOD USED IS DETERMINED BY WHAT QUESTION IS ASKED!

3-21-19

- ANOTHER WAY TO COMPARE: (THAN % Δ)

  RELATIVE RISK: $\dfrac{BIG}{LITTLE} \doteq \dfrac{2.16}{1.25} = 1.728$

  ↳ THOSE NOT TAKING ASPIRIN ARE 1.7 TIMES MORE LIKELY TO HAVE A HEART ATTACK.