

Problem 1

$P(p), P(n)$: Probability of positive/negative result

$P(C), P(nC)$ Probability of cancer/no cancer

$$P(p|C) = .98, P(n|nC) = .96 \implies P(n|C) = .02, P(p|nC) = .96$$

a) $P(C|p) = \frac{P(p|C)P(C)}{P(p)}$