

Assignment 5

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1 Write answers the following questions.

- (a) $\vec{P}(\text{Visit to Asia} \mid \text{dyspnoea}) = \langle 0.01032, 0.98968 \rangle$
- (b) $\vec{P}(\text{Tuberculosis} \mid \text{positive X-ray}, \neg \text{dyspnoea}) = \langle 0.05402, 0.94598 \rangle$
- (c) $P(\text{bronchitis} \mid \neg \text{lung cancer}) = 0.44286$
- (d) $P(\neg \text{lung cancer} \mid \text{tuberculosis}, \neg \text{dyspnoea}) = 0.95143$
- (e) $\vec{P}(\text{Smoking} \mid \neg \text{positive X-ray}, \text{bronchitis}, \neg \text{visit to asia}) = \langle 0.64565, 0.35435 \rangle$