

Assignment 6

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1 Solutions

- a. $\vec{P}(\text{Visit to Asia} \mid \text{dyspnoea}) = < \mathbf{0.01045}, \mathbf{0.98955} >$
- b. $\vec{P}(\text{Tuberculosis} \mid \text{positive X-ray}, \neg \text{dyspnoea}) = < \mathbf{0.04066}, \mathbf{0.95934} >$
- c. $P(\text{bronchitis} \mid \neg \text{lung cancer}) = \mathbf{0.44286}$
- d. $P(\neg \text{lung cancer} \mid \text{tuberculosis}, \neg \text{dyspnoea}) = \mathbf{0.94935}$
- e. $\vec{P}(\text{Smoking} \mid \neg \text{positive X-ray}, \text{bronchitis}, \neg \text{visit to asia})$
 $= < \mathbf{0.64565}, \mathbf{0.35435} >$