Machine Learning Assignment 65

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66-2

A

70%?

B

$$A: P(A|B) = \frac{P(A \cap B)}{P(B)} = \frac{0.2}{0.35}$$
$$B: P(C|B) = \frac{P(C \cap B)}{P(B)} = \frac{0.15}{0.35}$$
$$C: P(B|A \cup C) = \frac{P(B \cap (A \cup C))}{P(A \cup C)} = \frac{0.25}{0.7}$$
$$D: P(B|A, C) = P(B|A \cap C) = \frac{P(B \cap (A \cap C))}{P(A \cap C)} = \frac{0.1}{0.2} = \frac{1}{2}$$

C

$$A: P(2 \leq X \leq 5) = \frac{3 \ldots}{10 \ldots} = \frac{3}{10}?$$
$$B: P(X \leq 2|X \leq 5) = \frac{2 \ldots}{5 \ldots} = \frac{2}{5}?$$
$$C: P(3 \leq X \leq 8|X \geq 4) = \frac{4 \ldots}{6 \ldots} = \frac{4}{6}?$$