## Conditional Probability Worksheet 8

- 1. If all outcomes in a sample have an equal probability of occurring, then the probability model for that sample is uniform. Is this statement true or false?
- 5. P(C) = 0.60 and P(B|C) = 0.35. What is P(B and C)?
- 2. If two outcomes in a sample have a different probability of occurring, then the multiplication rule for events A and B, P(B)P(A|B) = P(A and B), can be used. Is this statement true or false?

7. P(A|B) = 0.40, P(A) = 0.60 and

P(B|A) = 0.20. What is P(B)?

6. P(A and B) = 0.35 and P(A|B) =

0.50. What is P(B)?

- 3. An event is a group of possible outcomes. Is this statement true of false?
- 8. P(B) = 0.50, P(A) = 0.25, and P(B|A) = 0.50. What is P(A|B)?
- Use the multiplication rules for uniform probabilities to answer questions 4-10.
- 9. P(B) = 0.20, P(A|B) = 0.30, and P(B|A) = 0.10. What is P(B)?
- 4. P(A) = 0.75 and P(B|A) = 0.50. What is P(A and B)?
- 10. P(A) = 1.00, P(B-A) = 0.25, and P(B) = 0.30. What is P(A-B)?

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