

# HW 1

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1. 0.39
2. True:  $P(e \cap w) = P(e)P(w)$   
and  $P(w \mid e) = P(w)$
3.  $P(w) = 0.47$ , need to assume that both are independent events (no overlaps in the sets)
- 4.
5.  $\frac{1}{52}$
6.   a 0.39  
      b 0.38  
      c 0.31  
      d 0.31
7. 0.009
8.   a 0.87  
      b 1