

# MATH 3215: Quiz 1

January 17, 2012

Consider a probability model for a hot-dog salesman's revenue on a Saturday afternoon. Let  $A$  be the event that it is sunny,  $B$  the event that he makes at least \$100, and  $C$  the event that he makes less than \$150.

Questions:

**1**

Describe the event  $(A^c \cap B) \cup C$  in hot-dog and weather words and shade the event in a Venn diagram of the three events.

**2**

Say the probability the hot-dog man makes between \$100 and \$150 is .3. What is  $\Pr(B) + \Pr(C)$ ? Do you have enough information to answer?