

Axioms

The sample space, Ω .

Events, $E \subseteq \Omega$.

Axioms of the probability function, P :

① $P(A) \geq 0$ for each event A ;

② $P(\Omega) = 1$;

③ If A_1, A_2, \dots is a sequence of events and these events are pairwise disjoint, then

$$P\left(\bigcup_{i=1}^{\infty} A_i\right) = \sum_{i=1}^{\infty} P(A_i).$$

Homework.

Choose problems from 1.1 to 1.37.

We will look at 1.2, 1.6, 1.8,

1.10, 1.26, and 1.32 in class, so be

sure to work on these.