

Related Problems

1 $A_n \uparrow A \Rightarrow A = \bigcup_{k=1}^{\infty} A_k$

2 Prove $(\bigcup_k A_k)^c = \bigcap_k A_k^c$ and use this to show deMorgan's 2nd equation.

3 Provide proofs of both Jensen's & Markov's Inequalities.

4 Show $I(A \cup B) = I(A) + I(B) - I(AB)$

5 Show $|E(X)| \leq E(|X|)$.

Challenge If $1 \leq k_1 \leq k_2$, ^{integers} then $E(|X|^{k_2}) < \infty \Rightarrow E(|X|^{k_1}) < \infty$

From the text

Read Chapter 1, 2.1, 2.2, 2.3,
pp 32, 33, 34 (1st paragraph)

Problems

p16 #'s 1, 3, 5
p36 #'s 4, 11, 14

Note Chapter 1 is to be read
lightly. It is intended to relate
E to the notion of an average.