

this time: intro;  
 uncertainty  
 about propositions

read: Getal. ch 1,  
 J ch. 1, D&S ch.

AMS 206  
 8 Jan 19

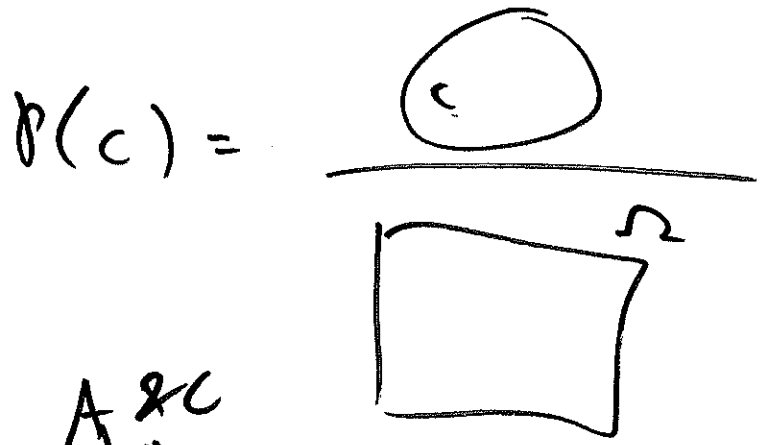
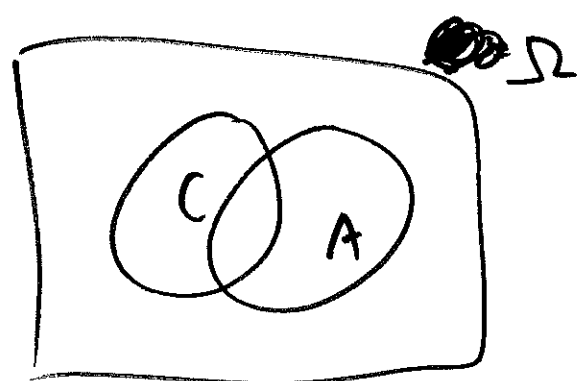
1-6 part → "AMS 206 winter 2019" <sup>①</sup>

next time:  
 foundations

in subject line of email to me

3 take-home tests, k  
 quizzes (k=5); all

via upload of PDF to Canvas



$$P(A|C) = \frac{\text{Area of } A \cap C}{\text{Area of } C} \quad (C \text{ is true})$$

A = rain  
 C = clouds

$P(\text{clouds} | \text{rain}) = \text{big}$

$P(\text{rain} | \text{clouds}) = \text{quite small}$

$$P(A|Bc) = \underline{\underline{P(A|C)}} \neq ? \text{ dead end} \quad (2)$$

$$P(A|Bc) = P(A|C) \cdot \square$$

"

$$\frac{P(ABC)}{P(Bc)} = \frac{P(Ac)}{P(C)}$$

$P(ABC)$	$P(C)$
$P(Ac)$	$P(Bc)$

"

$$P(A|Bc) = P(A|C) \cdot \frac{P(B|Ac)}{P(B|C)}$$

A C

$P(\text{really is HIV+} | \text{test says +}, \mathcal{B})$

vs.  $P(\text{test says +} | \text{really is +}, \mathcal{B})$

C A

sensitivity