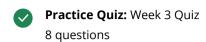


Survival estimates

Time to event data

Estimate survival with censored data

Quiz week 3



Assessment: Survival Estimates that Varies with Time

Congratulations! You passed!
TO PASS
RACTICE PUIZ · 30 MIN

Keep Learning

grade 100%

Week 3 Quiz

Week 3 Quiz

TOTAL POINTS 8

1. Let $f(x)$ be តែមេខាម៉ាងអាវីកេរី អាវុធាភាគារី on with feature x dies within 5 years.	1 / 1 point	Try again
Let $S_x(t)$ be the survival function of a person with feature x . Assume t is measured in years.	ı	
Which of the following is true?	Grade	View Feedback
TO PASS 80% or higher $f(x) = S_x(0)$	100%	We keep your highest sco
$f(x) = 1-S_x(5)$		
$igcirc$ $f(x)=S_x(5)$		6 P F
Correct Recall that S(t) is the probability that you live at least t years or more. Therefore, $S_x 5$ is the probability that yo live past 5 years.	ou	
$f(x)$ is the complement of that (probability of dying within 5 years). So it is 1 - S_x(5).		
2. The survival function is always:	1 / 1 point	
Decreasing		
Increasing		
Linear		
Correct The survival function is always decreasing. As time moves forward, it is less likely that you live for longer.		
3. Which of the following is a difference between survival data and classification datasets?	1 / 1 point	
In survival data the labels are amounts of time and in classification data the labels are binary		
Survival data can be used to build prognostic models		
Classification dataset contain information on other features		
✓ Correct		
Both survival data and classification data can be used to build prognostic models (we did this last week!).		
Both types of data can contain feature information.		
Survival data includes time, and is therefore not binary, unlike classification datasets.		
4. Which of the following is an example of censoring?	1 / 1 point	
✓ Death due to other, unrelated causes (such as an automobile accident)		
Correct If a person does die, but it is from an unrelated cause, all we know is that they lived up to that point, but we don't have information on whether they would have had the event (such as a heart attack) beyond that point	in	
time.		
So this is also right censored data.		
The patient withdraws from a study before having an event, and before the study ends.		
Correct If a patient withdraws from a study before the study ends, their data is right censored.		
Are the other options examples of right censoring?		
Patient does not have the event by the end of the study period.		
✓ Correct		
If a patient does not have the event by the time the study ends, that is an example of right censoring.		
Are the other options examples of right censoring?		

5. Estimate P(T>2|T>=2) from the following dataset:

i	T_i	
į	T_i	