

**QUESTION FOR MATH 343 FOR THE LECTURE OF  
12 MAY**

**Problem 1.** A continuous random variable  $X$  has the probability density function

$$f_X(t) = \begin{cases} 0 & t < 0 \\ e^{-t} & t \geq 0. \end{cases}$$

Find  $\Pr(X \leq 2)$  and  $\Pr(X \geq 2)$ .