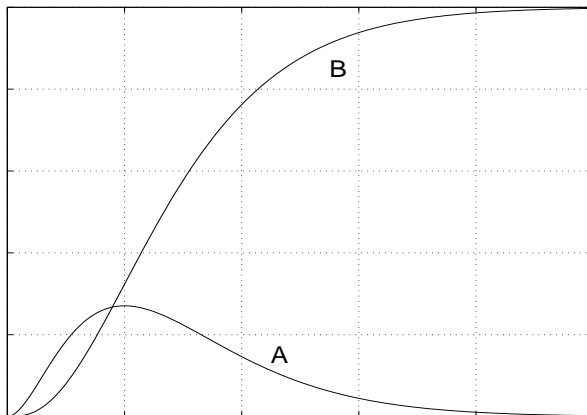**1.** (10 points) The figure shows the graphs of two functions, A and B, one of which is a probability density function and the other of which is the corresponding cumulative distribution function.
(a) Which curve represents the density function and which represents the cumulative distribution function?

(b) Put reasonable values on the tick marks on each of the axes.

2. (8 points) The radius of convergence of the power series $\sum_{n=0}^{\infty} \frac{3^n x^{2n}}{n+1}$ is $R =$ _____.
(Show your work and/or explain your reasoning.)