Q1: Let X be uniform on the interval [0, 100]: Find $e_X(d)$ for d > 0?

Q2: The distribution of X has the survival function

$$S_X(x) = 1 - \frac{\theta x^\gamma}{1 + \theta x^\gamma} \quad , \theta, \gamma > 0, \text{ and } 0 \text{ otherwise.}$$

The distribution of Y has pdf

$$S_Y(x) = 1 - \frac{e^{\frac{-x}{\theta}} x^{\gamma-1}}{\theta^\gamma \Gamma(\gamma)}$$

and 0 otherwise.

Compare the tail behavior of these distributions.