1. Let \( f(x) = -5 + 2^{3-x} \)

(a) What are the domain and range of \( f \)?

(b) \( \lim_{x \to +\infty} f(x) = \)

(c) \( \lim_{x \to -\infty} f(x) = \)

(d) Find the \( x \) and the \( y \) intercepts.

(e) Plot the intercepts and any asymptotes and graph \( f \).
2. Let $f(x) = 3 - (3)^{2^{x+1}}$

(a) What are the domain and range of $f$?

(b) Find any vertical or horizontal asymptotes.

(c) Find the $x$ and the $y$ intercepts.

(d) Graph $f$. 

![Graph of $f(x)$]