Topic 29: Graph exponential functions

1. Sketch the graph of $f(x) = -e^x$ and label all asymptotes and intercepts.

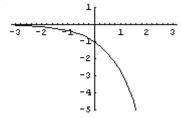
2. Sketch the graph of $f(x) = e^{x+2}$ and label all asymptotes and intercepts.

3. What is y-intercept of $f(x) = e^x - 1$?

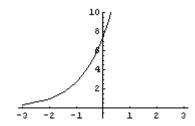
4. What is the equation of the horizontal asymptote for $f(x) = e^{x+1} - 4$?

Answers

1. y-intercept is -1. Horizontal asymptote is y=0.



2. y-intercept is $e^2 \approx 7.4$. Horizontal asymptote is y=0.



3. y=0, the point is (0,0).

4.
$$y = -4$$