

Name _____

- You have 15 minutes
- No calculators
- Show sufficient work

1. (4 points) Carefully sketch a graph of the following function. You should clearly label the value for any intercepts or asymptotes.

$$y = 2 - 6e^{-x}$$

2. (3 points) Given that $w(x) = \frac{3}{\ln(2e^x + 5)}$, find a formula for $w^{-1}(x)$.

3. (3 points) Determine all values of x which satisfy the equation below.

$$\ln(64e^{2x}) = 10$$