Your name: _____
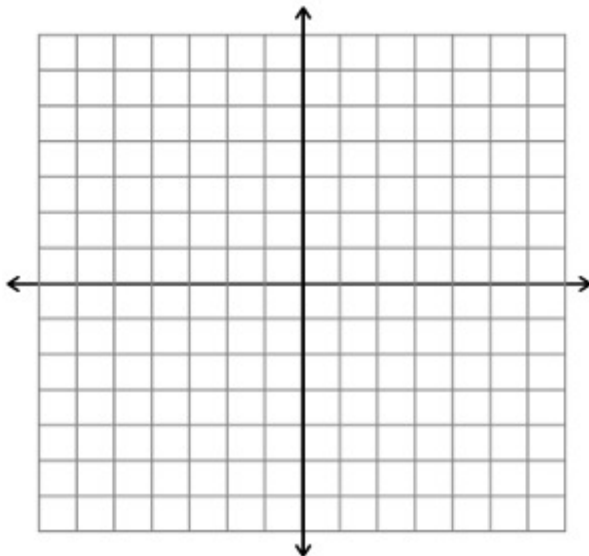
Please complete the following problems showing all work. You will be graded on mathematical accuracy and showing ALL steps. Each question is worth 5 points.

1. For the one-to-one function $f(x) = 3x + 8$, find a formula for the inverse function $f^{-1}(x)$.

2. Solve: $\log_2(4x - 8) = 3$

3. Graph the exponential function $f(x) = 2^x - 4$. Find and label the y-intercept and the asymptote.   In addition, label coordinates of 2 other points on the graph.

Y-intercept: (,   )

Equation of asymptote:_____

Additional points: (,   ) , (,   )