

Below are a few remarks regarding exam 1.

1. It is not true that  $\ln(a - b) = \ln a - \ln b$ .
2. On this question, you are to show that the function  $g(x) = y(x)/e^{-x^2}$  is constant. If your answer does not include the phrase “since  $g'(x) = 0$  on an interval, then  $g$  is constant on this interval”, then your answer is probably not complete.
3. On question 6, the answers must include units.
4. On question 8, it is not a good idea to relabel the axes. If  $(\pi/2, 1)$  is on the graph of  $f$  then,  $(1, \pi/2)$  is on the graph of  $f^{-1}$ .
5. Be sure to choose the correct sign when you take a square root. This caused problems on 7a) and 8b).
6. Question 9a) does not use L'Hopital.

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