

Math 1271 Quiz 3
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1.[5 pts.] Find the slope of the line tangent to the curve $y = 4xe^x + 7$ at the point whose x -coordinate is $\ln(2)$. Simplify your answer for full credit.

2.[5 pts.] Let $f(x) = \frac{2e^x}{e^\pi + x^{3/2}}$. Find $f'(x)$.

3.[10 pts.] The POSITION of a particle in meters at time t in seconds is given by $x(t) = 5\sec(t) + 3t^2$. Find the ACCELERATION of the particle at $t = 0$. Evaluate all trigonometric functions for full credit.