

Quiz Three, MTH 205, Fall 2014

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QUESTION 1.(i) $\ell\{(x - 3)^7 U(x - 3)\}$

(ii) Solve for $y(x)$: $y^{(2)} + 2y' + y = e^{-x}U(x - 1)$, $y(0) = y'(0) = 0$. [Note $e^{x+1000} = e^{1000}e^x$ and e^{1000} is constant].

(iii) Find $y(x) : y(x) + 2 \int_0^x \cos(u)y(x - u) du = \cos(x)$

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