

**Quiz Two, MTH 205, Fall 2014**

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QUESTION 1. (i)  $\ell^{-1} \left\{ \frac{s}{(s+2)^2} \right\}$ .

(ii)  $\ell^{-1} \left\{ \frac{s+6}{(s+2)^2+16} \right\}$ .

(iii)  $\ell^{-1} \left\{ \frac{(s+2)^2}{s^3} \right\}$

QUESTION 2. Solve the LDE:  $y^{(2)} + 6y' + 9y = xe^{-3x}$ ,  $y(0) = y'(0) = 0$ . (you may finish it on the back)

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