Hw 3 13S Asher Christian

$$58 - 6$$

$$Solve \qquad y' + 49 + 5 \int_{8}^{8} y \times = e^{-x}, y(0) = 0$$

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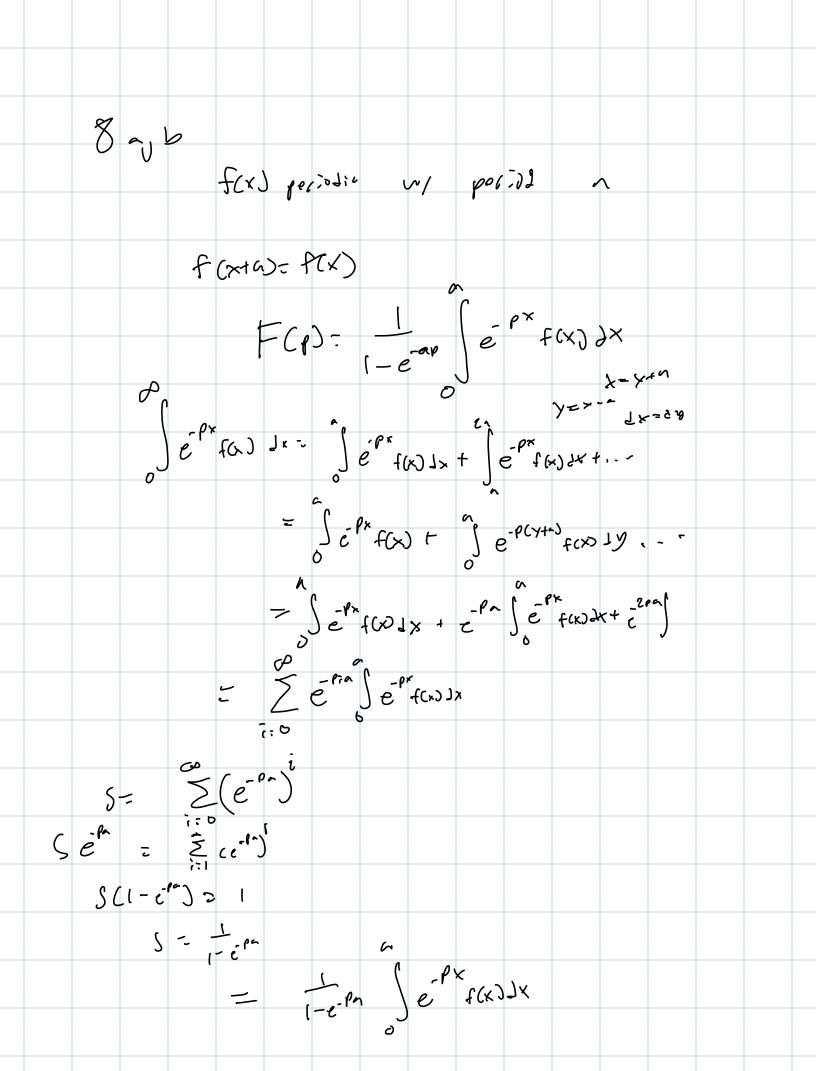
51

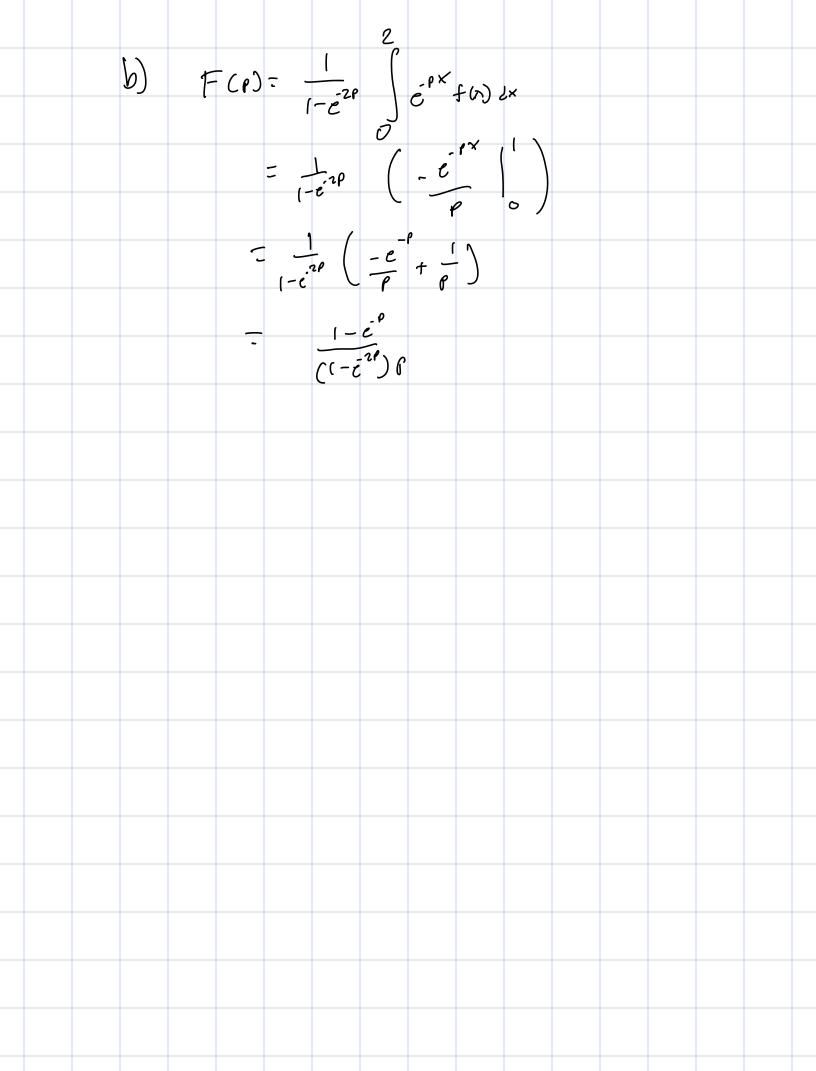
3

b
$$\times Y'' + (2x+3)Y' + (x+3)Y = 3e^{x} y(x) = 0$$

- $\frac{1}{4p}[p^{2}Y] - 2\frac{1}{4p}Y] + 3pY - \frac{1}{4p}Y + \frac{1}{4p}Y$

$$\int_{-\infty}^{\infty} \frac{1}{c\rho dt} \int_{-\infty}^{\infty} \frac{1}{c\rho d$$





52

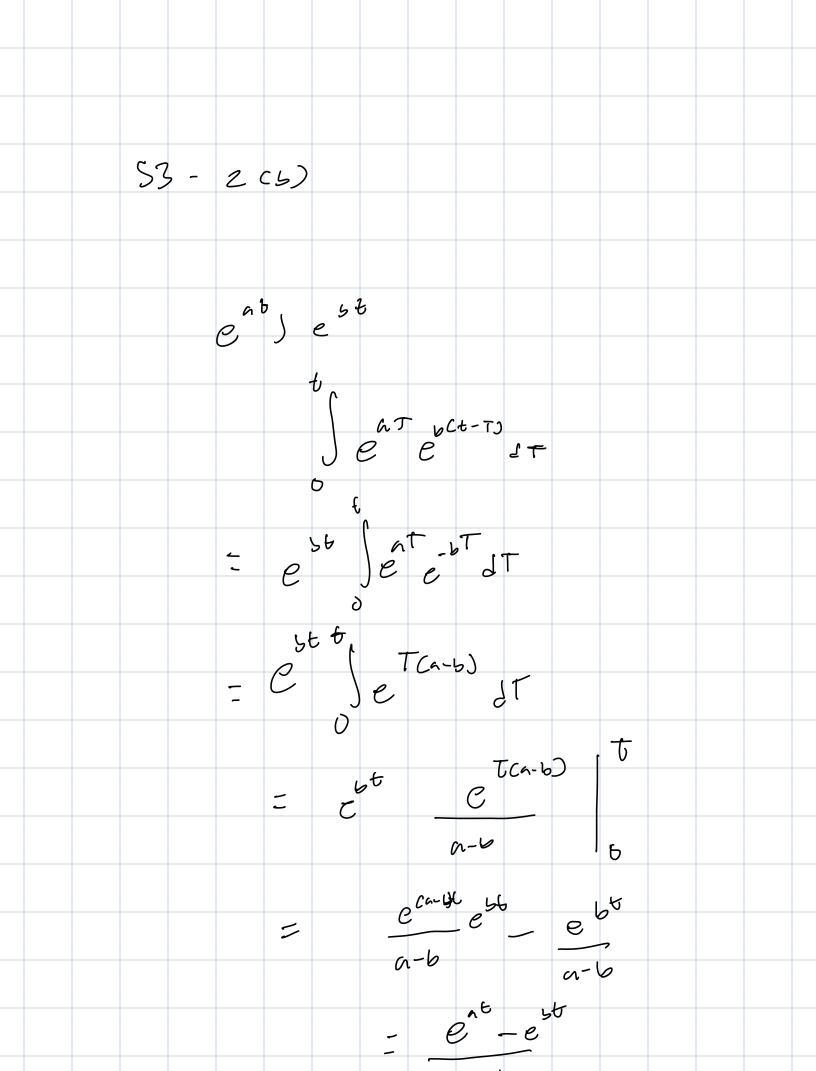
1 Find L' [
$$\frac{1}{p_{NR}} \cdot \frac{1}{p_{NR}} \cdot \frac{1$$

$$= \frac{\rho}{\rho(r)}$$

$$= \frac{$$

52-5

Show that
$$y = \frac{1}{3} \int_{1}^{3} f(x) \sin(x - x - x) dx$$
 $\int_{1}^{3} f(x) \int_{1}^{3} f(x) \int_$



$$Y(\omega) = \int_{0}^{\infty} \left[e^{t-T} - (\alpha-T) \right] 2T dT$$

$$= 2e^{t} \int_{0}^{\infty} Te^{T} - 2\int_{0}^{\infty} T - 2t \int_{0}^{\infty} T + 2\int_{0}^{\infty} T^{2}$$

$$= 2e^{t} \left[-te^{t} - e^{t} + 1 \right] - t^{2} - t^{2} + 2\int_{0}^{\infty} T^{2}$$

$$= -1 + 2 + 2e^{2}$$

$$= -1 + 2e^{2} - 2e^{2} - 2e^{2} - 2e^{2}$$

$$= -1 + 2e^{2} - 2e^{2} - 2e^{2} - 2e^{2}$$

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$$= -1 + 2e^{2} - 2e^{$$

$$| LT + RT = C_0 \sin wt$$

$$\int e^{\frac{R}{L}t} \sin w t dt = \frac{L}{R} e^{\frac{R}{L}t} \sin w t + \frac{L}{R} e^{\frac{R}{L}t} \sin w t + \frac{L}{R} e^{\frac{R}{L}t} \sin w t$$

$$= \frac{L}{R} e^{\frac{R}{L}t} \sin w t + \frac{L^{2}u}{R^{2}} e^{\frac{R}{L}t} \cos w t + \frac{L^{2}u}{R^{2}} e^{\frac{R}{L}t} \cos w t$$

$$= \frac{L^{2}u^{2}}{R^{2}} e^{\frac{R}{L}t} \sin w t + \frac{L^{2}u}{R^{2}} e^{\frac{R}{L}t} \cos w t$$

$$= \frac{L^{2}u^{2}}{R^{2}} e^{\frac{R}{L}t} \sin w t + \frac{L^{2}u}{R^{2}} e^{\frac{R}{L}t} \cos w t$$

$$= \frac{L^{2}u^{2}}{R^{2}} e^{\frac{R}{L}t} \sin w t + \frac{L^{2}u}{R^{2}} e^{\frac{R}{L}t} \cos w t$$

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$$= \frac{L^{2}u^{2}}{R^{2}} e^{\frac{R}{L}t} \cos w t + \frac{L^{2}u}{R^{2}} e^{\frac{R}{L}t} \cos w t$$

$$= \frac{L^{2}u^{2}}{R^{2}} e^{\frac{R}{L}t} \cos w t + \frac{L^{2}u}{R^{2}} e^{\frac{R}{L}t} \cos w t$$

$$= \frac{L^{2}u^{2}}{R^{2}} e^{\frac{R}{L}t}$$