1.2

11.) $c_1e^x + c_2e^{-x} = y$

$y'' - y = 0$

$y(0) = 1 \;,\; y'(0) = 2$

$y = c_1e^x + c_2e^{-x}$

$y' = c_1e^x - c_2e^{-x}$

$\Rightarrow \quad y(0) = c_1e^0 + c_2e^0 = 1$

$y'(0) = c_1e^0 - c_2e^0 = 2$

$\Rightarrow \quad c_1 + c_2 = 1$

$\oplus \quad c_1 - c_2 = 2$

$2c_1 = 3$

$\Rightarrow c_1 = \frac{3}{2}$

$\frac{3}{2} + c_2 = 1$

$c_2 = -\frac{1}{2}$

$\Rightarrow \frac{3}{2}e^x - \frac{1}{2}e^{-x}$