## MATH 54, FALL 2016, QUIZ 11

(1) Find the general solution to the following differential equation

$$
y^{\prime \prime}(t)-6 y^{\prime}(t)+9 y(t)=0
$$

(2) Find a solution to the following differential equation

$$
y^{\prime \prime}(t)-6 y^{\prime}(t)+9 y(t)=9 t^{2}
$$

(3) Find the solution to the differential equation

$$
y^{\prime \prime}(t)-6 y^{\prime}(t)+9 y(t)=9 t^{2}
$$

with initial values $y(0)=1$ and $y^{\prime}(0)=0$.

