Name (Last, First): $\qquad$
Student ID:

1. Find a particular solution to the following differential equation.

$$
y^{\prime \prime}-2 y^{\prime}-3 y=3 t e^{t}
$$

2. Find a general solution to the following differential equation.

$$
y^{\prime \prime}+3 y^{\prime}+2 y=t+e^{t}
$$

