

$$\frac{d^2y}{dt^2} + 4\frac{dy}{dt} + 5y = \sin 3t; \quad y(0) = -1; \quad y'(0) = 2;$$

$$\frac{d^2y}{dt^2} + 2\frac{dy}{dt} + 2y = 5 - \exp(-t) \cos t; \quad y(0) = 1; \quad y'(0) = 1;$$

$$\frac{d^2y}{dt^2} + 3\frac{dy}{dt} + 2y = 3 - \exp(-t); \quad y(0) = -1; \quad y'(0) = 0;$$

$$6\frac{d^2y}{dt^2} + 7\frac{dy}{dt} + y = \cos 2t + 2u, \quad p = -3 + j, \quad p = -3 - j; \quad y(0) = 0; \quad y'(0) = 2;$$

$$\frac{d^2y}{dt^2} + 4y = \sin 2t + u, \quad p = -2, \quad p = -3; \quad y(0) = -2; \quad y'(0) = 2;$$