„I" termin – Grupa A

Zad 1.

$$X' = \begin{pmatrix} 1 & -1 \\ 5 & -1 \end{pmatrix} X + \begin{pmatrix} 8t \\ 0 \end{pmatrix}$$

$$X\left(\frac{\pi}{2}\right) = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

Zad 2.

$$tx' = \sqrt{t^2 - x^2} + x$$

Zad 3.

$$J[u] = \int_1^2 [(u')^2 + 2uu' + u^2]dx$$

$$u(1) = 1$$

$$u(2) = 0$$