

ECON3120/4120 Mathematics 2, autumn 2008

Problems for Seminar 7, 20–24 October

- 1 Use Gauss-elimination to find all solutions of

$$x_1 + x_2 - 2x_4 = 2$$

$$2x_2 + x_3 + x_4 = 3$$

$$x_1 + x_2 + x_4 = 2$$

- 2 Exam problem 142.

- 3 Exam problem 69.

- 4 Find the general solution of the differential equation

$$\dot{x} + \frac{2}{t}x = e^t$$

Find, in particular, the integral curve passing through $(t, x) = (1, 1)$.

- 5 Exam problem 105.