E group calculus task:

Edited at 7am 17.4.2017.

1. Solve cubic, simultaneous equations.

2. Give main matrix operations.

3. Explain linear approximation.

4. Optimization:

Solve optimization problem for the cuboid of surface area = 6 square meters. Maximize the volume.

Complex numbers:

5. Give expressions for sum, difference, product, quotient, power and root of complex numbers.

6. Calculate.

a. 5 + 2i – 2 + 7i = . . .

b. (2i – 9)(4 + 7i) = . . .

c. (2i + 9)÷(4 + 7i) = . . .

d. (2i + 9)9 = . . .

e. 10.125 = . . .

Decision support:

7. Give decision support examples.

Design:

8. Use your knowledge for design.

Deadline: 22.4.2017 Saturday.