

Automatic control

Homework number: [4]

Student name: _____

Student registration number: _____

Class number: class [1] 10:10 – 11:00 class [2] 8:10 – 9:00

Assignment:

1.

B-4-1. Consider the conical water-tank system shown in Figure 4-42. The flow through the valve is turbulent and is related to the head H by

$$Q = 0.005\sqrt{H}$$

where Q is the flow rate measured in m^3/sec and H is in meters.

Suppose that the head is 2 m at $t = 0$. What will be the head at $t = 60$ sec?

