## Danmarks Tekniske Universitet

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## Exercise 3.4.2

a) This is completely similar to the problem in sec. 3.4.1.

Here  $\alpha = \frac{1}{10}$ ,  $\beta = \frac{6}{10}$ ,  $\gamma = \frac{3}{10}$ .

O u= P(XT=01X0=1), where T is the

time of absorption. Hence,

 $u = \alpha/(\alpha+\gamma) = \frac{1}{4}.$ 

b) For Y = EIT | Xo = 1], we get

 $V = (1-B)^{-1} = \left(\frac{4}{10}\right)^{-1} = \frac{5}{2}$