CPSC 3630 Assignment 3

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1 Q1

We wish to prove that for any language L_2 , if L_1 is regular, then the quotient L_1/L_2 is also regular. We proceed using the construction from Theorem 1.47:

Since L_1 is regular, there exists NFA $N_1=(Q,\Sigma,\delta,q_1,F_1)$ that recognizes L_1 , and NFA $N_2=(Q,\Sigma,\delta,q_2,F_2)$ that recognizes L_2 (i.e. $L_2(N_2)=L_2$). We construct $N'=(Q,\Sigma,\delta,q_1,F_2)$, TODO Q1