Math 36
Homework 04

Differential Equations: Epidemic Models

1. Using the epidemic model based on assumptions (1) - (4), find the time where the demand for medical services is highest.

2. Assume that the disease has a nonzero dormancy period. How would you change assumption (3)? State the corresponding differential equation for $\frac{dD}{dt}$. How does this affect the rest of the model, mathematically?