Vineyard Irrigation Scheduling
Part 1: Evapotranspiration

A vineyard Lubbock, Texas is divided into 4 irrigation blocks. Each block has 10 rows of vines with 200 vines per block being irrigated with two, 1 GPH emitters per vine. Each row of vines is approximately 120 feet long with a 6 feet row spacing.

1. What is the average monthly ETo in July for Lubbock, Texas?

2. If the wine grapes have a crop coefficient of 0.8, what is the monthly water requirement in July (in inches) assuming no rainfall?

3. What is the daily water requirement (in inches)?

4. What is the weekly water requirement (in inches)?