

Homework 11 Due Monday @ 6pm

15.3 1, 4, 8, 10, 13, 15, 23, 24, 26, 29, 30, 31

15.4 1, 2, 4, 6, 7, 8, 10, 17, 18, 21, 22

α) The surface area of Tuttle Creek Lake is about $7 \cdot 10^8$ ft². If a wind is obeying the vector field

$$\vec{F} = [1234^{-1}y + e^{\arctan x}] \vec{i} + [4321^{-1}x + \sinh^{-1} y] \vec{j},$$

and if you walk all the way around around the lake's shoreline counterclockwise, then calculate the amount of work that the wind does to you. Overall, were you going into the wind more, or was the wind more at your back?

β) Work all the problems in the **1998 Fall Exam 2**– located at our webpage in the "problems" section.