This week on the problem set you will get practice thinking about potential functions and calculating line integrals.

Homework: The homework will be due on Friday 3 March, at 12pm, the *start* of the lecture. It will consist of questions:

$$17.4.41 \quad \text{and} \quad 17.5.22.$$

*Numbers in parentheses indicate the question has been taken from the textbook:

J. Rogawski, C. Adams, *Calculus, Multivariable*, 3$^{\text{rd}}$ Ed., W. H. Freeman & Company,

and refer to the section and question number in the textbook.

1. (Section 17.4) 27, 30, 34, 37, 40, 41*, 46* 48*.

2. (Section 17.5) 1, 6, 7, 12, 17, 18, 21, 22, 31*, 35.

*The questions marked with an asterisk are more difficult or are of a form that would not appear on an exam. Nonetheless they are worth thinking about as they often test understanding at a deeper conceptual level.