## MATH 202: VECTOR CALCULUS READING QUESTIONS FOR FRIDAY WEEK 11

## **Reading assignment.** *CAES* §9.11.

*Problem* 1. Draw examples of contractible and non-contractible sets in  $\mathbb{R}^2$ . (You do not have to prove that your intuition about these sets is correct.)

*Problem* 2. In single variable calculus, the only functions with derivatie 0 are constant functions. Is every closed form constant in some sense? Why or why not?