HOMEWORK 2

due date: March 6, 2018

a) Draw the set
$$M = \{(x, y) \in \mathbb{R}^2 : x^2 + y^2 \leq 1 \ \& \ x < 0\}.$$

Decide, whether M is open resp. closed.

b) Draw the sets $\operatorname{Int} M$, $\overline{M}$, $\operatorname{bd}(M)$ (each in a separate picture) and then write these sets using symbols

$$\operatorname{Int}(M) =$$
$$\overline{M} =$$
$$\operatorname{bd}(M) =$$