Definition 9.20. *[ONW] Let $x \in X, r > 0$ be given; we will indicate with $B(x, r)$ the **ball**,*

$$B(x, r) \stackrel{\text{def}}{=} \{y \in X \,:\, d(x, y) < r\}$$

that is also indicated with $B_r(x)$; and with

$$D(x, r) \stackrel{\text{def}}{=} \{y \in X \,:\, d(x, y) \leq r\}$$

*the **disk**, that is also indicated with $\overline{B}_r(x)$.*