Errata for the Notes on the course Topologie en Meetkunde

This is an incomplete list of corrections to the lecture notes for the course Topologie en Meetkunde. We will try to update it regularly. If you spot any mistakes or typos, please let us know.

(1) In Defintion 2.7, formula 2.1: "$B \subset U$" should be replaced by "$x \in B \subset U$".
(2) In lemma 2.11: "$x \in B_1 \subset B_2$" should be replaced by "$x \in B_2 \subset B_1$".
(3) In Exercies 4.3: "Show that $f([0, 2\pi))$ is not open in S^1" should be replaced by "Show that $f([0, \pi))$ is not open in S^1".
(4) In Exercise 5.3: "If their product $X \times Y$,...", should be replaced by "If their product $X \times Y$ is normal,...".
(5) In Exercise 5.4: "property that $f = 0$ outside U" should be replaced by "property that $f = 0$ inside U".
(6) In Exercise 5.5: "and $g : X \to \mathbb{R}$" should be replaced by "and $g : U \to \mathbb{R}$".
(7) In Exercise 5.5: "$f(x)$ if $x \in U$" should be replaced by "$g(x)$ if $x \in U$".
(8) In Definition 5.8: "$\sum_{i=1}^{n} = 1$" should be replaced by "$\sum_{i=1}^{n} \eta_i = 1$".
(9) In the proof of Lemma 5.12: "is equivalent to $V \subset X - V$" should be replaced by "is equivalent to $V \subset X - U$".
(10) In Exercise 5.7: one should add "assuming X is a Hausdorff space".
(11) In the proof of Theorem 6.6: "assume that $A \subset X$ is closed" should be replaced by "assume that $A \subset X$ is compact".
(12) In the proof of Theorem 8.4, first paragraph: "then $U \cap V = U - K = U \cap (X - K)$ is open because U and $X - K$ are" should be replaced by "then $U \cap V = V - K = V \cap (X - K)$ is open because V and $X - K$ are".
(13) In the proof of Theorem 8.4, first formula: "$U \cap V$" should be replaced by "$U \cup V$".
(14) In the proof of Theorem 8.4, second paragraph: "This shows that $U \cap V \in \mathcal{T}^+$." should be replaced by "This shows that $U \cup V \in \mathcal{T}^+$.".
(15) In proof of Theorem 8.4, third paragraph: "...an open cover $\mathcal{U}$ of X" should be replaced by "...an open cover $\mathcal{U}$ of X^+".
(16) In proof of Theorem 8.4, third paragraph: "..., $\mathcal{U}$ should contain a set of type $U = X - K$" should be replaced by "..., $\mathcal{U}$ should contain a set of type $U = X^+ - K$".
(17) In proof of Theorem 8.4, second formula: "$\mathcal{V} \cup \{X^+ - V\}$" should be replaced by "$\mathcal{V} \cup \{X^+ - K\}$".
(18) In Example 9.7, first example: "But $\mathbb{R} - \{0\}$ is connected" should be replaced by "But $S^1 - \{p\}$ is connected".