Exercise 5.8. [1ZR] *Prove*[a] *that in a group:*

1. *If* $x + y = x + z$ *then* $y = z$.
2. *If* $x + y = x$ *then* $y = 0$.
3. *If* $x + y = 0$ *then* $y = -x$.
4. $-(-x) = x$.

[a] [16] Prop. 1.14