Exercise 3.75. [1WH]Prerequisites:[23X].(Proposed on 2022-12) *For each set A and each relation R between elements of A, explain if it is reflective, symmetric, antisymmetric and/or transitive; if it is a order relation, determine if it is total.*

- *In $A = \mathbb{N} \setminus \{0\}$, nRm iff the greatest common divisor between n and m is 1*
- *In $A = \mathbb{N} \setminus \{0\}$, nRm if and only if n divides m*
- *In $A = \mathbb{N} \setminus \{0\}$, nRm if and only if $2n$ divides m*
- *In $A = \mathcal{P}(\mathbb{N})$, aRb if and only if $a \subseteq b$.*