Quiz 7, 8/5/16

1. If $R = \{(1,2),(1,4),(2,3),(3,1),(4,2)\}$, find the reflexive closure of R.
2. Suppose the relation R is defined on the set $\mathbf{Z}$ where aRb means that $ab \leq 0$. Determine whether R is an equivalence relation on $\mathbf{Z}$.

Solutions. 1. $\{(1,1),(1,2),(1,4),(2,2),(2,3),(3,1),(3,3),(4,2),(4,4)\}$.

2. No (not reflexive, not transitive).

□