Worksheet H

Dr. M. P. M. M. McLoughlin

Consider:
Claim: $U = \mathbb{R}$ and

$A = \mathbb{N}$.

$B = \{b | b = 3w, w \in \mathbb{N}\}$
$C = \{c | c = 7q, q \in \mathbb{N}\}$
$D = \{b | d = 10k, k \in \mathbb{N}\}$

For each $w \in D$ there exists an element $x \in B$ and an element $y \in C$ so that $w = x+y$.

Prove or disprove the claim.