

b) $35 \notin B$?

\Rightarrow To show $35 \notin B$ let us select an arbitrary element k_0 such that $k_0 \in \mathbb{N}$.

$$n = 4k_0 + 1 \text{ for some } k_0 \in \mathbb{N}.$$

we can write,

$$35 = 4k_0 + 1$$

$$4k_0 = 34$$

$$k_0 = \frac{34}{4} \notin \mathbb{N}$$

$$m = 4\left(\frac{34}{4}\right) + 1$$

$$n = 4k_0 + 1 \in B$$

$$35 = 4\left(\frac{34}{4}\right) + 1$$

Hence, $34/4$ is not a natural number.