

$\mathbb{Z}R(5)$

For $\mathbb{Z}_{(2)}$ there is
a unique ordering $<_{(2)}$
such that

$$n <_{(2)} n + \frac{1}{2}$$

$$\text{and } n + \frac{1}{2} <_{(2)} n + 1$$

Similarly, one can
generate the ordered set
 $(\mathbb{Z}_{(4)}, <_4)$ where
 $\mathbb{Z}_{(2)} \subsetneq \mathbb{Z}_{(4)}$ and
 $<_4$ extends $<_2$