

## 1 Modulo Operator (Arithmetic Remainder)

If  $x \in \mathbb{R}^+$  and  $n \in \mathbb{N}$ , we can uniquely write  $x = mn + r$ , where  $m \in \mathbb{W}$  and  $r \in [0, n)$ .

We define

$$x \bmod n = r$$

e.g.  $10.5 \bmod 3 = 1.5$