What does $a \equiv b \pmod{0}$ mean?

From 4.35, we have

$$a \equiv b \pmod{m} \iff a \mod m = b \mod m$$

Therefore, our problem reduces to,

$$a \mod 0 = b \mod 0$$

From 3.22 we have $x \mod 0 = x$

ie., $a \equiv b \pmod{0}$ means $a = b$

END