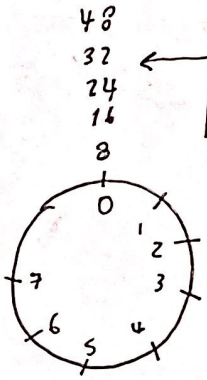
$7x = 1 \mod(8)$

$7(1) \equiv_8 7$



$7(5) \equiv_8 3$

35

$7(7) \equiv_8 1$

49

x tiene que ser 7

cap. 4 Rosen

neutro multiplicativo 1

neutro suma 0

32 · 4.1 Rosen

32) a)

$(19^2 \mod(41)) \mod(9)$

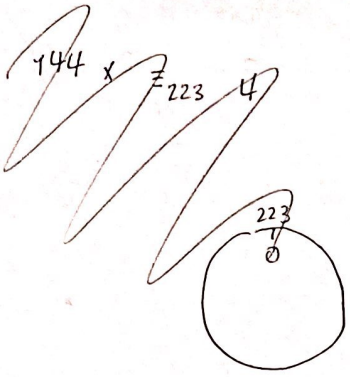
$(19 \cdot 19 \mod(41) \mod(9)$

$(361 \mod(41)) \mod(9)$

$\text{floor}\left(\frac{361}{41}\right) \approx 8$

$(361 - 8 \cdot 41) \mod(9)$

144 x ≡223 4

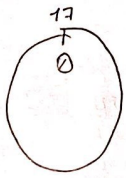


34 x ≡89 77

77 ≡89

a = 2 m = 17

$a \cdot \bar{a}^{-1} \equiv_{17} 1$



1 ≡ 18 ≡ 35

2 · 9

$\bar{a}^{-1} \equiv_{17} 9$

a = 34 m = 89

1 ≡ 90 ≡

a = 4 m = 9

1 ≡ 10 ≡ 20 19 ≡ 28

4 · 5 4 · 7

$\bar{a} \equiv 7$