Ryan Erickson

Spring 2014

22C:019 Homework 2

∧∨Å →↔∃∀

page 244

14a. c = 10

page 245

40. n^2 = 1(mod8); n = 4k+1

n^2 = 16k^2+8k+1

= 16k^2(mod8) + 8k(mod8) + 1(mod8)

n^2 = 1(mod8)

page 272

14. 1,5,7,11

24b. 2x3x11

page 273

32d. 139

32e. 1

page 285

20. =17(mod60); x = 60k + 17

34(show all steps).

23^1002 = (23^40)^25 x 23^2

= 529(mod41)

= 37(mod41)

page 293

28a. 1

28c. 5

30. all numbers detectable unless: 1 ↔ 7, 1↔8, 2↔9

page 304

2b. NOJK KJGGPODJI

page 305

24. 2299 1317 2117

26. SQUIRREL