Modular Arithmetic Practice Exercises

1. For each of the following computations modulo , write the unique answer, , such that .

a)

b)

c)

d)

e)

f)

g) \_\_\_\_\_\_ (mod 5)

h) \_\_\_\_\_\_\_\_ (mod 8)

2. For each of the following modulo “equations” (technically they are called “congruences”), find the mod solution set; that is, find all solutions, , such that , where is the modulus of the “equation.”

a)

b)

c)

d)

e)