

Assignment 2

due date: Wednesday, October 3rd, 2007.

Drill questions:

1. Evaluate

$$\begin{array}{lll} 5 + 3(mod6) & 4 - 7(mod5) & 3 \cdot 5(mod3) \\ 2 \cdot (-1)(mod11) & 2 \cdot 4(mod8) & \end{array}$$

2. Problem 31, page 24.
3. Problem 29, page 24.
4. Solve the following equations

$$\begin{array}{lll} 5 \cdot 3 \equiv X(mod6) & 4 \cdot X \equiv 5(mod7) & 2 \cdot X \equiv 5(mod13) \\ X \cdot (-1) \equiv 9(mod11) & 2 \cdot X \equiv 14(mod17) & \end{array}$$

Assignment:

1. (from Russian math olympiad) What is a 100, if $5 \cdot 6 = 33$?
2. Solve the equation $5 \cdot X = 1(mod65537)$.