CSE 321: Discrete Structures
Assignment #3
Due: Wednesday, April 20

Reading Assignment: Section 1.6-1.8, 2.4-2.5, 3.1, and pp. 234-236 of Rosen.

Problems:

1. Section 1.6, exercise 16.
2. Section 1.7, exercise 22.
3. Section 1.8, exercise 16.
4. Section 1.8, exercise 26.
5. Section 1.8, exercise 32.
6. How many zero are there at the end of 100! ? Here $n!$ means the product of all integers from 1 to n.
7. Show that if a, b and m are integers such that $m \geq 2$ and $a \equiv b (\mathrm{mod}\ m)$, then $gcd(a, m) = gcd(b, m)$.
8. Show that $a \cdot b = gcd(a, b) \cdot lcm(a, b)$.