Euler totient functions

1. Calculate ϕ(81)
2. Calculate ϕ(144)
3. Calculate ϕ(98)
4. Verify that the sum of ϕ(d) over all positive divisors d of 24 equals 24.
5. Verify that the sum of ϕ(d) over all positive divisors d of 45 equals 45.

Euler theorem

1. Verify Euler's Theorem for a=5and n=8.
2. Verify Euler's Theorem for a=4 and n=9.
3. Use Euler's Theorem to compute 2ϕ(11) mod  11
4. Use Euler's Theorem to compute 10ϕ(21)mod  21
5. Find x such that 7100 ≡ x mod  15 using Euler's Theorem.[Advanced]