**CSE 484 In-class Worksheet #0xDEADBEEF (Fall 2016)**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ UWNetID: \_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID #: \_\_\_\_\_\_\_\_\_\_\_

Partner names for this activity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Q1:** What is ϕ(p) if p is prime?

**Q2:** On a scale from 1-5, how much more detail do you want on why the decryption operation of RSA works?

**Q3**: Imagine you want to send me a 1GB file, encrypted using my RSA key. Remember that you can’t encrypt messages longer than N=pq, which is definitely much shorter than 1GB. What will you do? What will you encrypt with RSA? Your answer should involve symmetric crypto.