**Properties:**

Postconditions

1. Checks that the c\_amod15 function throws an exception if a non-coprime integer is entered
2. Checks that qpe\_amod15 function returns a phase between 0 and 1
3. Checks that qpe\_amod15 function throws an exception if a non-coprime integer is entered
4. Checks that find\_factor function returns an array containing 3 or 5 (or both) upon entering a coprime integer
5. Checks that find\_factor function throws an exception upon entering a non-coprime integer