- 1. For list-of-terms, terms with coefficient == 0 simply don't exist inside the list. This saves space and there are less terms to iterate through, so creator and producer functions are more efficient. However, runtime of getCoeff(), which is used in many other methods, is logarithmic for list-of-terms and constant for array, so overall performance of operations will be worse for list-of-terms than array.
- 2. Because RatPoly is immutable, there are only creator, producer, and observer functions. Observers never modify instances, and producers only call RatPoly constructors in their return statements, so checkRep calls are only included at the end of constructors (creators). It is useless to call checkRep at the beginning of constructors, since code to create a valid instance has not executed yet.