

## Problem 2

- a) An advantage of using `List<Term> terms` over `RatNum[] coeffs` is that `terms` doesn't need to include coefficients that are 0, saving space when it comes to the coefficients being stored. But, `terms` requires an integer exponent to be stored with every coefficient. So, it's probably better to use `terms` when the degree of the polynomial is low (less integers to store) and `coeffs` when there aren't too many 0 coefficients (less space wasted on 0s).
- b) I only included `checkRep()` at the end of constructors because all the fields of `RatPoly` are immutable, meaning that no change can happen to a `RatPoly` that would violate the rep invariant. All `RatPolys` are made using one of the constructors (producers use constructors to create a `RatPoly`), so if `checkRep()` is satisfied at the end of a constructor, it's assured that the rep invariant doesn't get violated anywhere else.