COMP-335

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Homework 1

1. Valid or invalid:
   1. Valid, a single atom is a valid s-expression.
   2. Valid, a valid s-expression in syntax as well.
   3. Valid, same as i., a single atom and a valid s-expression.
   4. Valid, same as ii., completely valid.
   5. Valid, a list of two numbers.
   6. Invalid (mismatched parentheses).
2. Testing for equality is as simple as testing if, with two numbers, one subtracted from the other results in 0. So we can use (if0 (- (ArithC) (ArithC)) (then) (else)) to perform an equality test.