

ComS 342
Recitation 2, 10:00 Tuesday
Homework 2

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1.
 - (a) $(\text{let } ((f\ 58))\ (*\ (-\ f\ 32)\ (/ \ 5\ 9))\)$
 - (b) $(\ \text{let}(\ (x\ 12)\ (y\ 1)\)(\ \text{let}(\ (x\ (-\ x\ 11))\)(-\ x\ y)))\)$
2.
 - (a) This expression returns an error. The issue is in the second scope:
 $(\text{let } ((z\ 2)\ (x\ y))\ (+\ x\ z))$
This can be evaluated as $\rightarrow (z = 2), (x = y), (x += z)$
However, y is undefined here, so $x = y$ is unable to be calculated.
 - (b) This expression evaluates to 3. Procedure below:
 $\{x = 3, y = 0, \{y = (y = x)\}\} \Rightarrow \{\{y = (y = 3)\}\} \Rightarrow \{\{y = 3\}\} \Rightarrow 3$
3.
 - (a) Free: a, b
Bound: c, x, y, z
 - (b) Free: b, c, g, y
Bound: a, x