CS313K: Logic, Sets, and Functions

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Lecture 25 – Chap 8 (8.3, 8.4, 8.5, 8.6)

Clarification

$\{1, 2, 3\}$	set containing 1, 2, and 3
$\{j, j+1, j+2\}$	set containing j, $j+1$, and $j+2$
{ `(1)`, `(2)` }	set containing two singleton lists
{ `x`, `(first x)` }	???

Clarification

Suppose `x` is the list `(1 2 3)`. Does

{`(first x)`}

denote

(a) the set whose only element is `1`, or

(b) the set whose only element is the object `(first x)`, a list of length 2 containing the two symbols `first` and `x`?

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Clarification

Suppose `x` is the list `(1 2 3)`. Does

`{'(first x)}`

denote

(a) the set whose only element is 1, or

(b) the set whose only element is the object `(first x)`, a list of length 2 containing the two symbols `first` and `x`?

Correction

In Question 363, I should have written

Let S be $\{$`'(A)`, `'(B C)`, `'(D E)`$\}$ and R be the set $\{$`'(1 2 3)`, `'(4 5 6)`$\}$.

instead of

Let S be $\{$`(A)`, `(B C)`, `(D E)`$\}$ and R be the set $\{$`(1 2 3)`, `(4 5 6)`$\}$.

Correction

Actually, I think:

Let S be $\{$`(A)`, `(B C)`, `(D E)`$\}$ and R be the set $\{$`(1 2 3)`, `(4 5 6)`$\}$.

is unambiguous since we've never mentioned function symbols `A`, `B` and `D`, and `1` and `4` can't be function symbols!