

## More List-of-Num Examples

```
; A list-of-num is either  
; - '()  
; - (cons num list-of-num)
```

Implement the function **feed-fish**, which takes an aquarium and feeds each fish 1 lb of food

Implement the function **large-fish**, which removes every fish that is less than 5 lbs from an aquarium

# List-of-Posn

```
; A list-of-posn is either  
; - '()  
; - (cons posn list-of-posn)
```

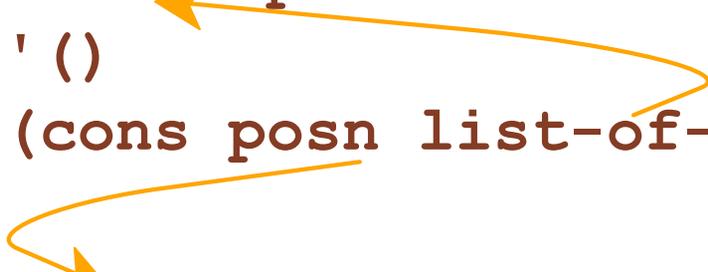
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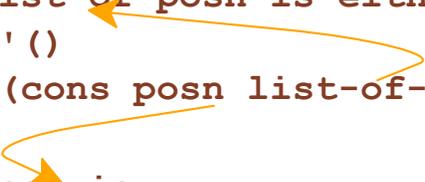
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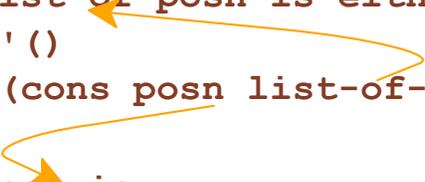
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; list-of-posn -> ...  
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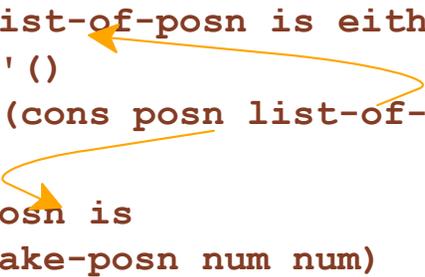
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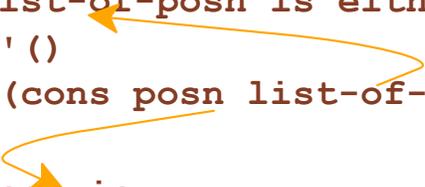
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# List-of-Posn Examples

Implement the function **flip-posns**, which flips the X and Y parts of every posn in a list of posns

# List-of-Grade Example

```
; A grade is either  
; - number  
; - ' ()
```

Implement the function **all-passed?**, which takes a list of grades and determines whether all are passes

# List-of-List-of-Num Example

```
; A list-of-lon is either  
; - '()  
; - (cons list-of-num list-of-lon)
```

Implement the function **sums**, which takes a list of list-of-numbers and produces a list of sums

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Still, DrRacket prints `|| conses`

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If you change DrRacket's language level to

**Beginning Student with List Abbreviations**

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Don't switch until you understand how `list-of-...`  
functions match the shape of the data definition

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For consistency, `'1` is the same as `1`

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      (cons (cons 2 (cons 4 (cons 6 (cons 8 ' ())))  
            (cons (cons 3 (cons 9 (cons 27 ' ())))  
                  ' ())))))
```