

Programming in Lisp
Lecture #3: Class Activity

Name:

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1. Write a function, using *mapcar* that, given a list of radii, computes a list of cons holding the circumference and area of the circles. Note that the symbol **pi** evaluates to 3.14159...

2. Write a function that converts a list to an array.

3. Consider the following structure

```
(defstruct right-triangle a b c)
```

a) Change this definition to automatically compute c from a and b . *Hint: set up a default value.*

b) Given your new definition, and using the automatically created functions, write a function to check to see if the right-triangle is isocles (two sides equal). Be sure the input structure is a right-triangle.

4. Repeat Problem 2, using iteration.