

SIMPLE FUNCTIONS

POETRY OF PROGRAMMING – CLOJURE ASSIGNMENTS

The code snippets show some example calls of the functions to be written. **Your solution should produce exactly the same output.**

- (1) Write a function `p1` that makes any number it receives ten times bigger.

```
(p1 2)
20
(p1 -1)
-10
(p1 100)
1000
```

- (2) Write a function `p2` that calculates $x^2 + 2x + 1$ for a given number x as the input of the function!

```
(p2 2)
9
```

- (3) Using the functions `p1`, `p2` define a function that calculates $10x^2 + 20x + 10$, and another one computing $100x^2 + 20x + 1$. Hint: `comp` might be helpful.
- (4) Write a function `p4` that takes two positive numbers a and b as sides of rectangles, and returns a string containing information about the circumference and area of the rectangle.

```
(p4 2 3)
"Rectangle with sides 2,3; area=6; circumference=10."
```

EXTRA Write a function that given numbers a, b, c , it returns a function that calculates $ax^2 + bx + c$.