

In-Class Worksheet

Discrete Math & Functional Programming— CSCI 054— Spring 2025

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What are the types of these functions?

1. `addTriplet (x, y, z) = x + y + z`

2. `addTriplet' x y z = x + y + z`

3. a function `pythagoras` that takes a tuple of integers (a, b, c) and returns `True` if and only if $a^2 + b^2 = c^2$.

```
maxInt :: [Integer] -> Integer

maxInt [x] = x

maxInt (x:xs) = max x (maxInt xs)
```

Use pattern matching to write a function that returns the last element of a list (i.e. the tail function, but without using tail)

Use pattern matching to write a function that returns the second-to-last element of a list