

CSE 130 (Wi 25) Handout

Jan 14, 2025

Question 1

How can we implement a record that contains **three** values? Fill in the blanks below to implement `TRIPLE`, `FST3`, `SND3` and `THD3` so that they “pass the tests” `ex1`, `ex2` and `ex3`.

ELSA: <https://elsa.goto.ucsd.edu/index.html>

```
let TRIPLE = \x -> (\y -> (\z -> _____))
```

```
let FST3   = \t -> _____
```

```
let SND3   = \t -> _____
```

```
let THD3   = \t -> _____
```

eval ex1:

```
FST3 (TRIPLE apple banana orange)
=> apple
```

eval ex2:

```
SND3 (TRIPLE apple banana orange)
=> banana
```

eval ex3:

```
THD3 (TRIPLE apple banana orange)
=> orange
```

Question 2

Which of these is a valid encoding of `ZERO` ?

- **A:** `let ZERO = \f x -> x`
- **B:** `let ZERO = \f x -> f`
- **C:** `let ZERO = \f x -> f x`
- **D:** `let ZERO = \x -> x`
- **E:** None of the above