

# LISP ASQ

Part 2

Define a function to calculate distance from velocity (argument vel) and time (argument time).

```
(DEFUN DIST _____ )
```

```
(vel time) (* vel time)
```

Fill in the missing part \_\_\_\_\_ to define a function returning smaller of two numbers.

```
(DEFUN SMALLER (a b) (COND _____ (T b)) )
```

```
((< a b) a)
```

DVE-CISLA should evaluate to T **iff** (if and only if) its argument is a list with two numbers. **Find a counterexample.**

```
(DEFUN DVE-CISLA (zoz)
```

```
  (AND (NUMBERP (FIRST zoz))
```

```
        (NUMBERP (FIRST (REST zoz)))) ) )
```

```
(1 2 3)
```

DVE-CISLA should evaluate to T iff (if and only if) its argument is a list with two numbers. **Fix the function.**

```
(DEFUN DVE-CISLA (zoz)
  (AND (NUMBERP (FIRST zoz))
        (NUMBERP (FIRST (REST zoz))) _____ ) )
(NULL (REST (REST zoz)))
```

Define a function which returns the same list as argument except the first and second elements, which are reordered

```
))  
(CONS (FIRST zoz)  
(CONS (FIRST (REST zoz))  
(REST (REST zoz)))  
(DEFUN VYMEN (zoz)
```

Define a function which returns a list with second and third element of a list. (write a code)

```
(DEFUN DRUHY-TRETI (zoz))
```

Tu sa dlho caka na odpoved.

Select everything that evaluates to T:

- (= 5.0 5)
- (< 1 2 3 (+ 2 2))
- (EQ 5.0 5)
- (EQUAL 5.0 5)



Select all expressions that evaluate to T

- (EQ 'A 'A)
- (EQ '(A) '(A))
- (EQUAL 'A 'A)
- (EQUAL '(A B) '(A B))

Evaluate the following expression:

```
(EVAL (CONS '+ '(2 3)))
```

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