

Name (**print clearly**): _____

Student ID (**print clearly; 1 digit per underline**): _____

1 Runtimes

1. List the runtime of a reasonable solution alongside each function below:

```
fun length(values : 'a list) : int =  
    (* imagine reasonable solution here *)  
fun to_squares(xs : int list) : int list =  
    (* imagine reasonable solution here *)  
fun sum_distances_to_origin(xys : (real*real) list) : real =  
    (* imagine reasonable solution here *)  
fun closest_to_origin(xys : (real*real) list) : (real*real) option =  
    (* imagine reasonable solution here *)  
fun sum_scan(xs : int list) : int list =  
    (* imagine reasonable solution here *)  
fun concat(as : 'a list, bs : 'a list) : 'a list =  
    (* imagine reasonable solution here *)  
fun reverse(values : 'a list) : 'a list =  
    (* imagine reasonable solution here *)  
fun remove_first_occurrence(xs : ''a list, target : ''a) : ''a list =  
    (* imagine reasonable solution here *)  
fun eliminate_unsorted(xs : int list) : int list =  
    (* imagine reasonable solution here *)
```

2 Ridiculous/Unnerving

1. Which runtimes seem the most ridiculous/unnering?

.....

.....

.....

.....