

; • CSC104 Winter 2020 — Exercise #2 — Print out and fill in by hand, then hand in to the TA at the start of your quiz. •

; UtorID (login ID) :

; Surname :

; Given Name :

; • Part A. Show all the following steps.




; You do not need to include the “•Steps•”, “○”, nor “-” punctuation that DrRacket shows when using `step`.

; Include ALL the underlining of sub-expressions that will change.

; In DrRacket, the `step` operation starts by copying the expression given to `step` so that it can add the underlining

; for that initial expression, but you may save some effort by adding the initial underlining directly to the original

; expression inside `(step ...)` rather than recopying that expression.

`(step (map tall (list   )))`

`(step (map triangle (list 30 10 20)))`

`(step (map text-join (list "ant" "bear" "ox")))`

`(step (map function? (list "ant" #true list flip )))`

`(step (map text? (list text-length "ant" scale  25)))`

`(step (map list? (list "ant" list #false - 25)))`

`(step (map binary? (list list? list length)))`




```
(step (map - (map text-length (list "ant" "bear" "ox"))))
```

```
(step (map flip (map above (list   ))))
```

```
(step (map clockwise (map text->image (list "ant" "bear" "ox"))))
```


```
(step (map + (map width (map wide (map solid-circle (list 30 10 20))))))
```

; • Part B. Assume the following definitions have been entered/run ...



(define (a b) (turn  b))	(define (f c) (oval c 15))
(define (b c) (scale-width c 2))	(define (g e) (+ e 10))
(define (c b) (turn b 45))	(define (h f) (* f f))
(define (d a) (scale-height  a))	(define (i g) (text-join "-" g))
(define (e h) (above  h ))	(define (j g) (text-join g g " "))

; ... and show all the following steps (with the same guidelines as described in Part A) ...

(step (a 90))

(step (b (c )))

(step (map d (list 3 1 2)))

(step (map e (list  )))

```
(step (map f (map g (list 0 20 10))))
```

```
(step (map square (map h (list 5 3 4))))
```

```
(step (map text-length (map i (map j (list "o" "xx"))))))
```