

```
(require spd/tags)
```

```
;; QUESTION [30 seconds]
```

```
;;
```

```
;; Which template would you use as the basis for a function
```

```
;; with this signature?
```

```
;;
```

```
(@signature Intersection -> TrafficLight)
```

```
;; A. The template from Intersection.
```

```
;; B. The template from TrafficLight.
```

```
;; C. An entirely new template would have to be created.
```

```
;; QUESTION [60 seconds]
```

```
;;
```

```
;; What is the next step in the evaluation of the following expression?
```

```
(cond [(> 3 4) "charlie"]  
      [(= 6 6) "bravo"]  
      [else    "alpha"])
```

```
;; A.
```

```
"bravo"
```

```
;; B.
```

```
[(= 6 6) "bravo"]
```

```
;; C.
```

```
(cond [false "charlie"]  
      [(= 6 6) "bravo"]  
      [else    "alpha"])
```

```
;; D.
```

```
(cond [(= 6 6) "bravo"]  
      [else    "alpha"])
```

;; QUESTION [30 seconds]

;;
;; What is the next step in the evaluation of the following expression?

```
(cond [false "A"]  
      [else "B"])
```

;; A. (cond ["A"]
;; [else "B"])
;; B. (cond [else "B"])
;; C. "A"
;; D. "B"

```
;; QUESTION [90 seconds]
;;
;; There are two errors in the following function design. A single action
;; you are supposed to take when using the recipe (on a computer) would have
;; uncovered both of these errors.
;;
```

```
(@htdf circle-area)
(@signature Number -> Number)
;; Given radius compute circle area
(check-expect (circle-area 2) (* 3.14159 (sqr 2)))
(check-expect (circle-area 3 4) 2)
```

```
;(define (circle-area r) 0 ;stub
```

```
(@template-origin Number)
```

```
(define (circle-area r)
  (* 3.14159 (sqr r)))
```

```
;; The first error is (first means the one that appears first in the
;; program text):
;;
;; A. In the purpose.
;; B. In the signature.
;; C. In the stub.
;; D. In the check-expects.
```

```
;; QUESTION [20 seconds]
;;
;; There are two errors in the following function design. A single action
;; you are supposed to take when using the recipe (on a computer) would have
;; uncovered both of these errors.
;;
(@htdf circle-area)
(@signature Number -> Number)
;; Given radius compute circle area
(check-expect (circle-area 2) (* 3.14159 (sqr 2)))
(check-expect (circle-area 3 4) 2)

;(define (circle-area r) 0 ;stub

(@template-origin Number)

(define (circle-area r)
  (* 3.14159 (sqr r)))

;; The second error is:
;;
;; A. In the purpose.
;; B. In the signature.
;; C. In the stub.
;; D. In the check-expects.
```

```
;; QUESTION [30 seconds]
;;
;; There are two errors in the following function design. A single action
;; you are supposed to take when using the recipe (on a computer) would have
;; uncovered both of these errors.
;;
;; This design suggests that a key step was missed during the design process.
;; What was it?
(@htdf circle-area)
(@signature Number -> Number)
;; Given radius compute circle area
(check-expect (circle-area 2) (* 3.14159 (sqr 2)))
(check-expect (circle-area 3 4) 2)

;(define (circle-area r) 0 ;stub

(@template-origin Number)

(define (circle-area r)
  (* 3.14159 (sqr r)))

;; A. Checking that the signature matches the problem statement.
;; B. Checking that the purpose matches the signature.
;; C. Running the check-expects using the stub.
;; D. Commenting out the stub.
```