

Exercises 2 – 6 are programming problems. Submit them in a single file named `a03.rkt` electronically per the instructions for your course.

1. Study Hailperin, Sections 4.1, 4.3.
2. Do Hailperin, Exercise 3.10.
3. Do Hailperin, Exercise 3.11.
4. Do Hailperin, Exercise 3.12.
Name the function `first-survivor-after` so that

```
(first-survivor-after 0 8)
```

returns 4, and

```
(first-survivor-after (first-survivor-after 0 8) 8)
```

returns 7.

5. Do Hailperin, Exercise 4.9.
The test program will assume the vertices are entered in order bottom left, bottom right, and top.
The call

```
(triangle -1 -.75 1 -.75 0 1)
```

should return an equilateral triangle.

6. Do Hailperin, Exercise 4.10.