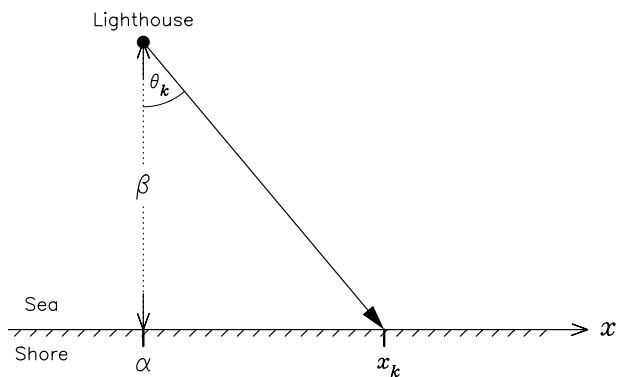# Exercise 1

- given the problem of the lightouse discussed last week, study the case in which both the position along the shore (α) and the distance out at sea (β) are unknown

Exercise 2

- given the Signal over Background example discussed last week, analyzed and discuss the following cases:

1) vary the sampling resolution of used to generate the data, keeping the same sampling range

```
xdat <- seq(from=-7*w, to=7*w, by=0.5*w)
```

- change the resolution $w = \{0.1, 0.25, 1, 2, 3\}$

- Check the effect on the results

2) change the ratio A/B used to simulate the data (keeping both positive in accordance with the prior)

- Check the effect on the results