Part 5.5: Shape
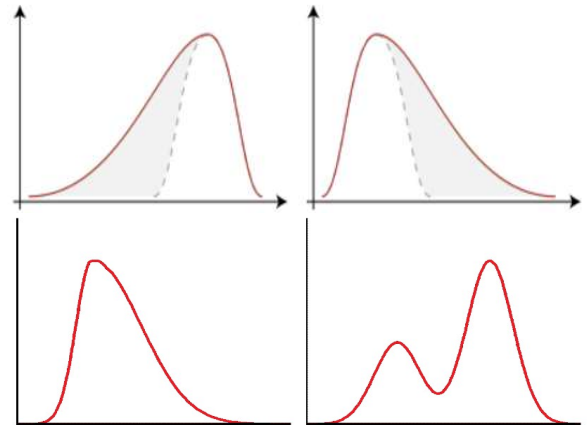
In the shape we need to look at two things… the skew and the modality.

If the distribution has a long tail to the left, it is skewed to the left (like left diagram).

If it has a long tail to the right it is skewed to the right (like right diagram).

We also need to say if there is one mode (unimodal, left diagram) or two modes (bimodal, right diagram).

Discuss the shape for each of the sets of data, the first one has been done for you.

1. The forwards weights appear to be skewed to the right, as shown by the trail of points off to the right, whereas the backs weights seem reasonably symmetrical as the points are reasonably evenly spread out around the middle. The backs appear to be unimodal whereas the forwards are potentially bimodal.

1. Rugby Players Weight by Position

Back
```
min: 77
lq: 88
med: 92
mean: 91.746
uq: 96
max: 105
sd: 9.6998
num: 59
```

Forward
```
min: 98
lq: 104.5
med: 110.5
mean: 111.32
uq: 117
max: 137
sd: 10.61
num: 76
```

Position

Weight (kg)

Made with NZGrapher   www.mathsnz.com