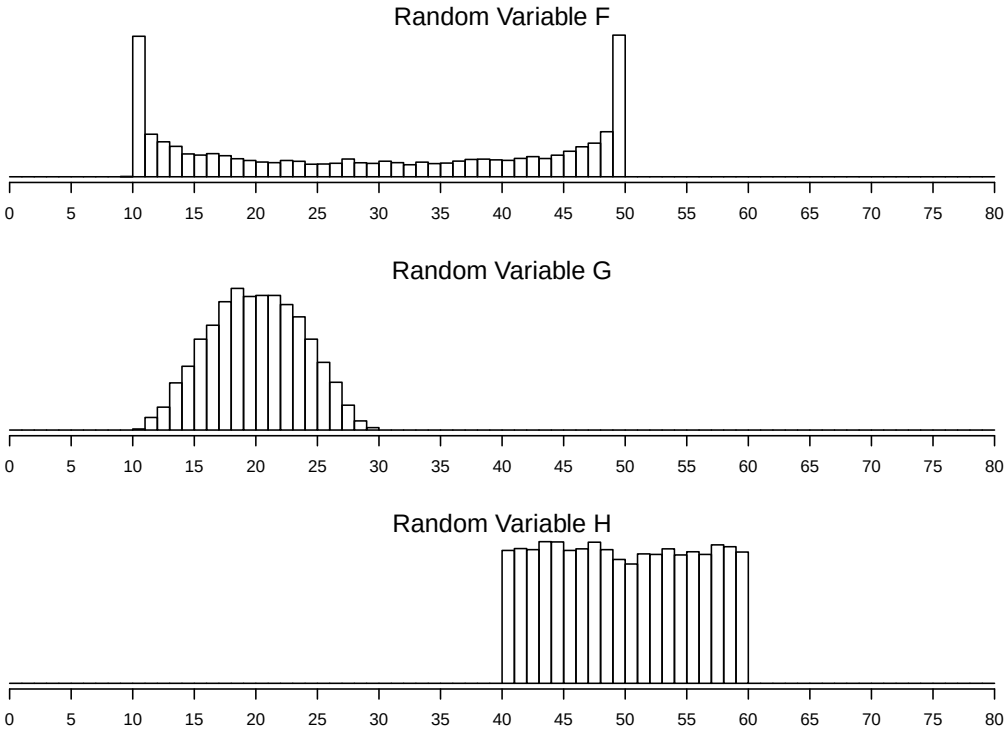
1. **Problem**
   We can estimate the mean of a **symmetric** distribution.

$$\bar{x} \approx \frac{\max(x) + \min(x)}{2}$$

We can **roughly** estimate the standard deviation of certain distributions.

Shape	SD estimate
bell	range/6
uniform	range/4
bimodal	range/2

Three random variables (F, G, and H) were measured 10000 times each. The resulting histograms show the three distributions.



(a) Estimate the mean of F.

(b) Estimate the mean of G.

(c) Estimate the mean of H.

(d) Estimate the standard deviation of F.

(e) Estimate the standard deviation of G.

(f) Estimate the standard deviation of H.

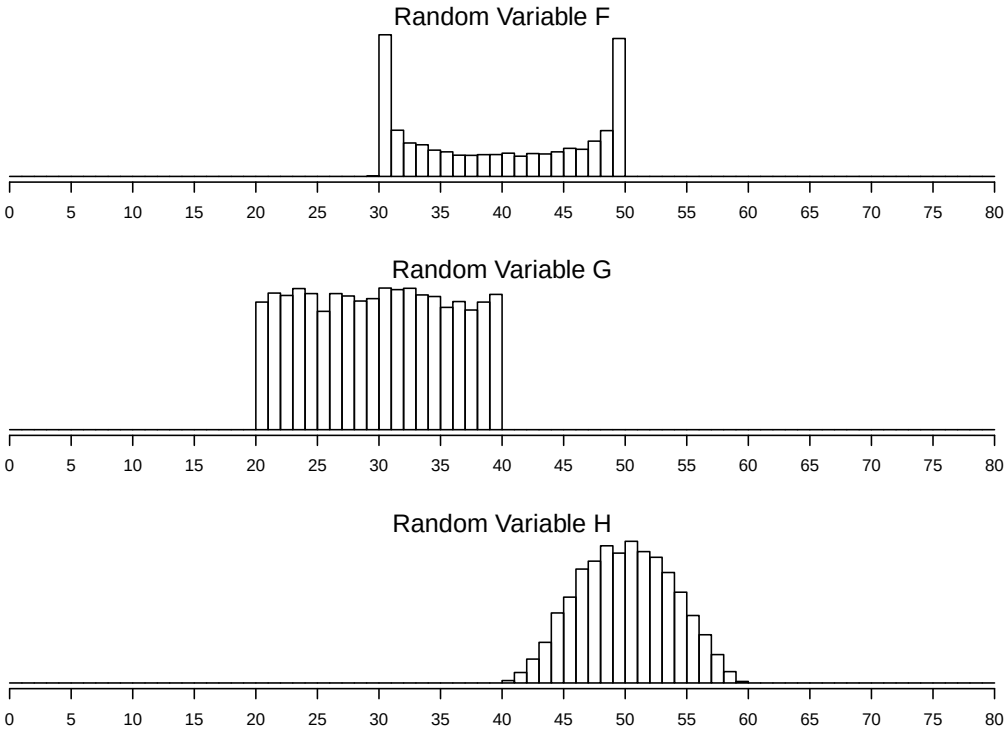
2. **Problem**
We can estimate the mean of a **symmetric** distribution.

$$\bar{x} \approx \frac{\max(x) + \min(x)}{2}$$

We can **roughly** estimate the standard deviation of certain distributions.

Shape	SD estimate
bell	range/6
uniform	range/4
bimodal	range/2

Three random variables (F, G, and H) were measured 10000 times each. The resulting histograms show the three distributions.



(a) Estimate the mean of F.

(b) Estimate the mean of G.

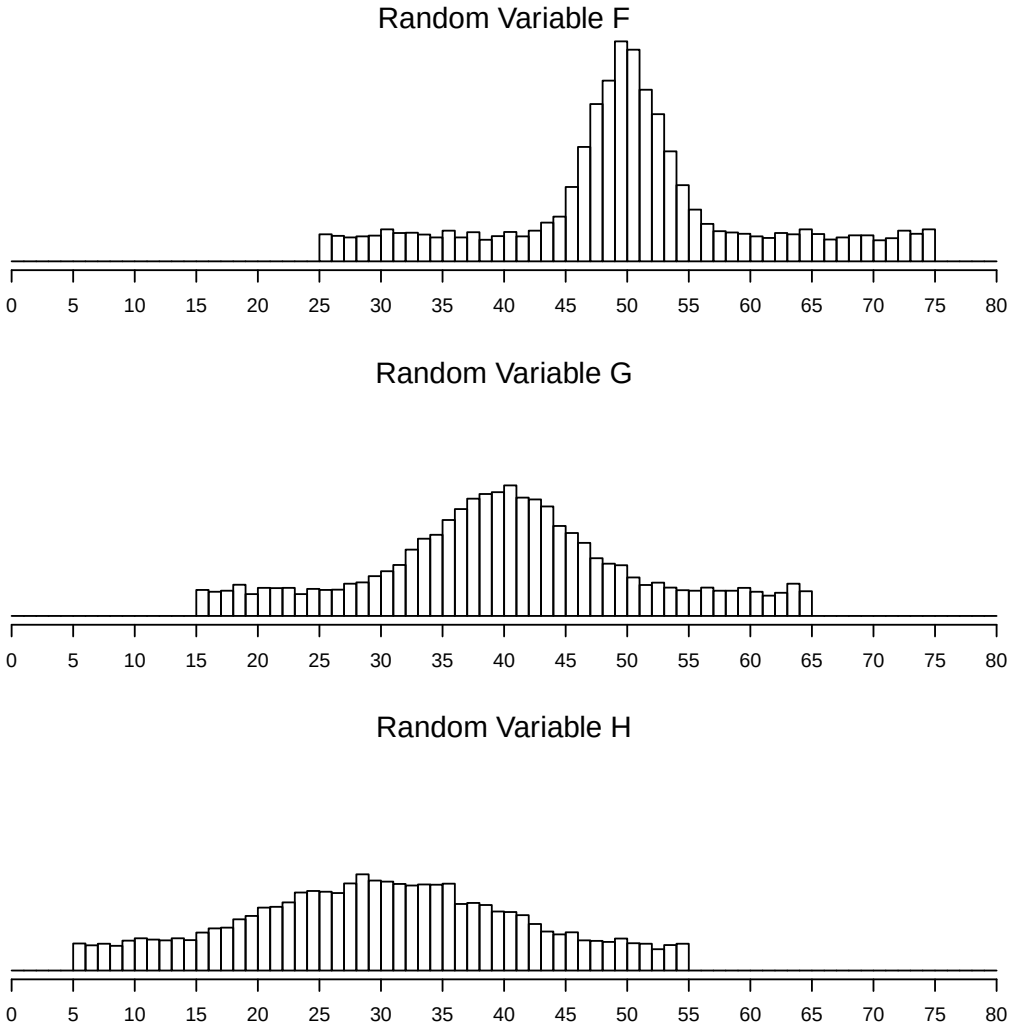
(c) Estimate the mean of H.

(d) Estimate the standard deviation of F.

(e) Estimate the standard deviation of G.

(f) Estimate the standard deviation of H.

3. **Problem**
Three random variables (F, G, and H) were measured 1000 times each. The resulting histograms show the three distributions.



(a) Which distribution has the highest mean? (F, G, or H)

(b) Which distribution has the lowest mean? (F, G, or H)

(c) Which distribution has the largest standard deviation? (F, G, or H)

(d) Which distribution has the smallest standard deviation? (F, G, or H)

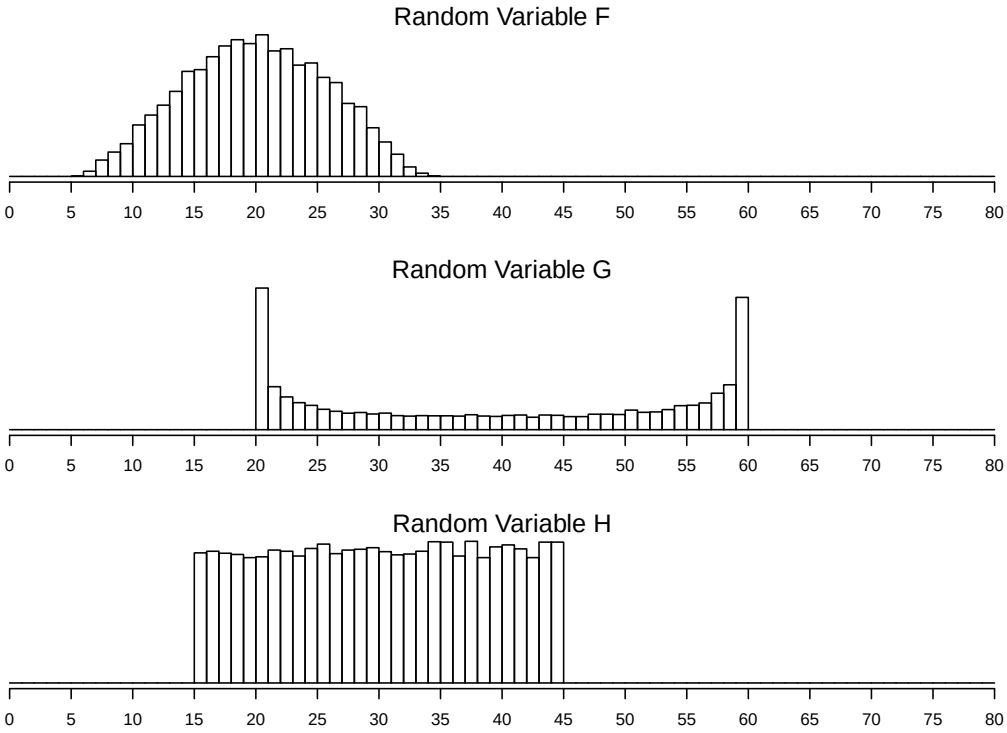
4. **Problem**
We can estimate the mean of a **symmetric** distribution.

$$\bar{x} \approx \frac{\max(x) + \min(x)}{2}$$

We can **roughly** estimate the standard deviation of certain distributions.

Shape	SD estimate
bell	range/6
uniform	range/4
bimodal	range/2

Three random variables (F, G, and H) were measured 10000 times each. The resulting histograms show the three distributions.



(a) Estimate the mean of F.

(b) Estimate the mean of G.

(c) Estimate the mean of H.

(d) Estimate the standard deviation of F.

(e) Estimate the standard deviation of G.

(f) Estimate the standard deviation of H.

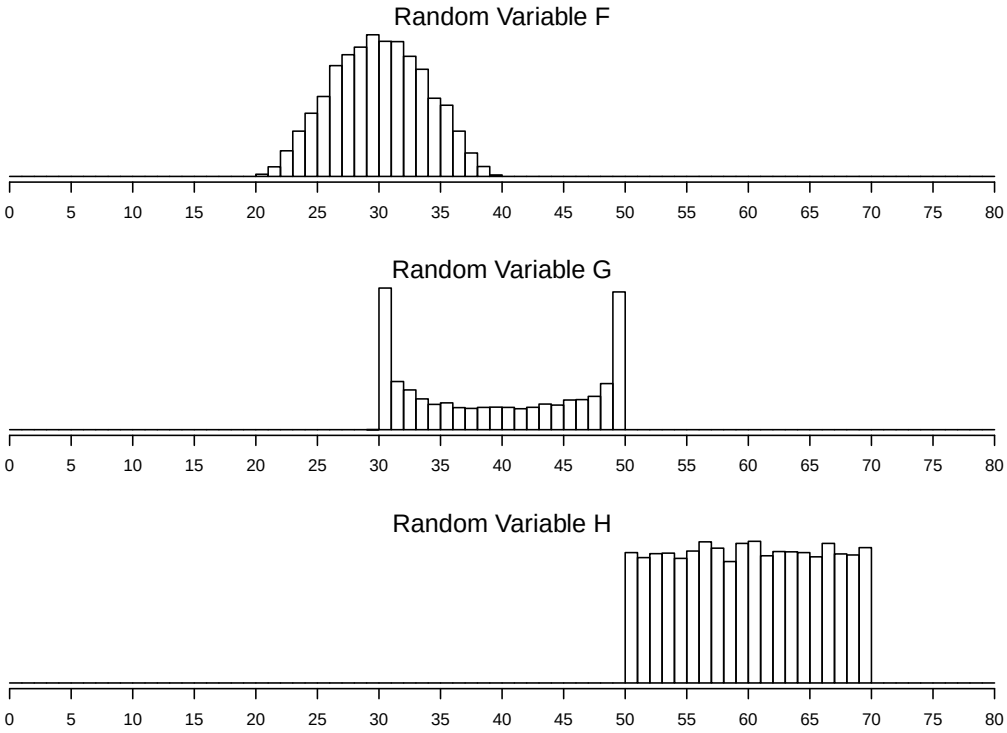
5. **Problem**
We can estimate the mean of a **symmetric** distribution.

$$\bar{x} \approx \frac{\max(x) + \min(x)}{2}$$

We can **roughly** estimate the standard deviation of certain distributions.

Shape	SD estimate
bell	range/6
uniform	range/4
bimodal	range/2

Three random variables (F, G, and H) were measured 10000 times each. The resulting histograms show the three distributions.



(a) Estimate the mean of F.

(b) Estimate the mean of G.

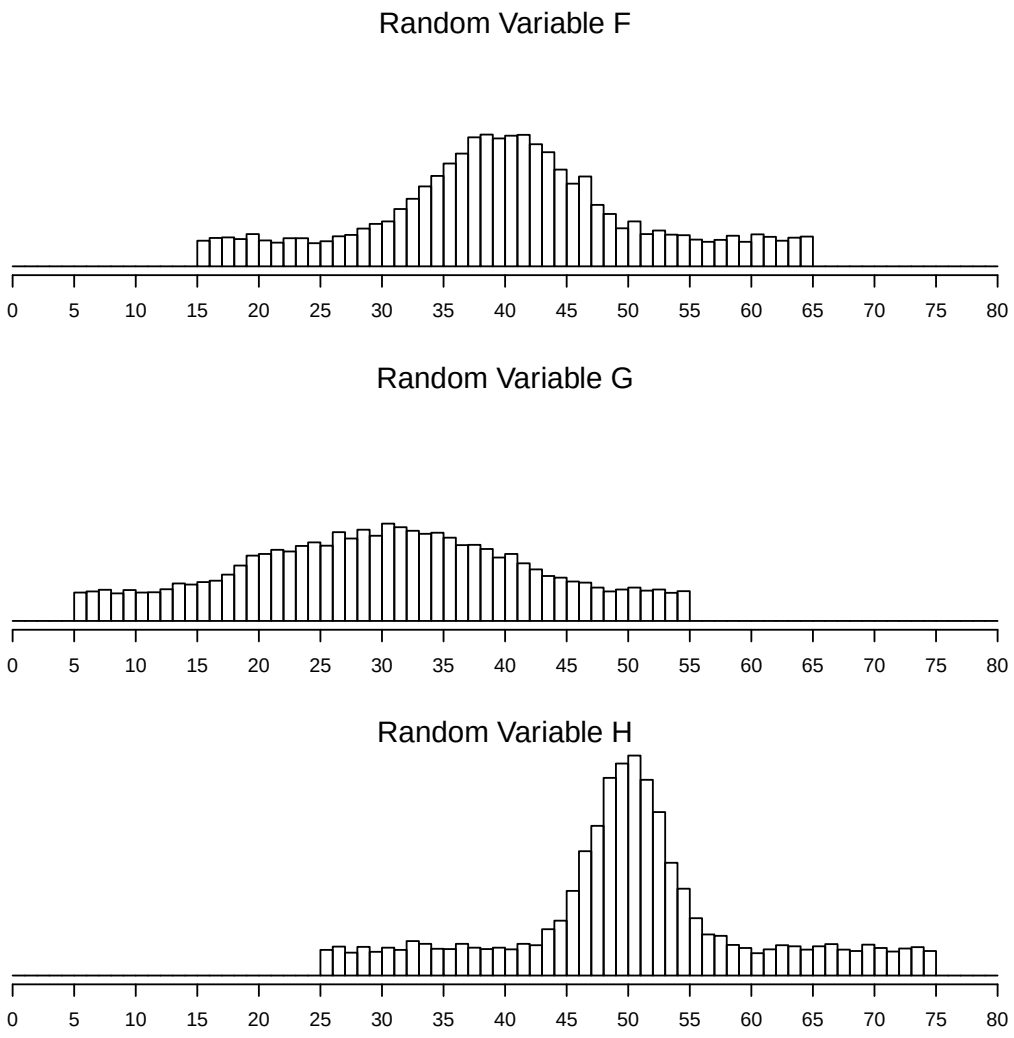
(c) Estimate the mean of H.

(d) Estimate the standard deviation of F.

(e) Estimate the standard deviation of G.

(f) Estimate the standard deviation of H.

6. **Problem**
Three random variables (F, G, and H) were measured 1000 times each. The resulting histograms show the three distributions.



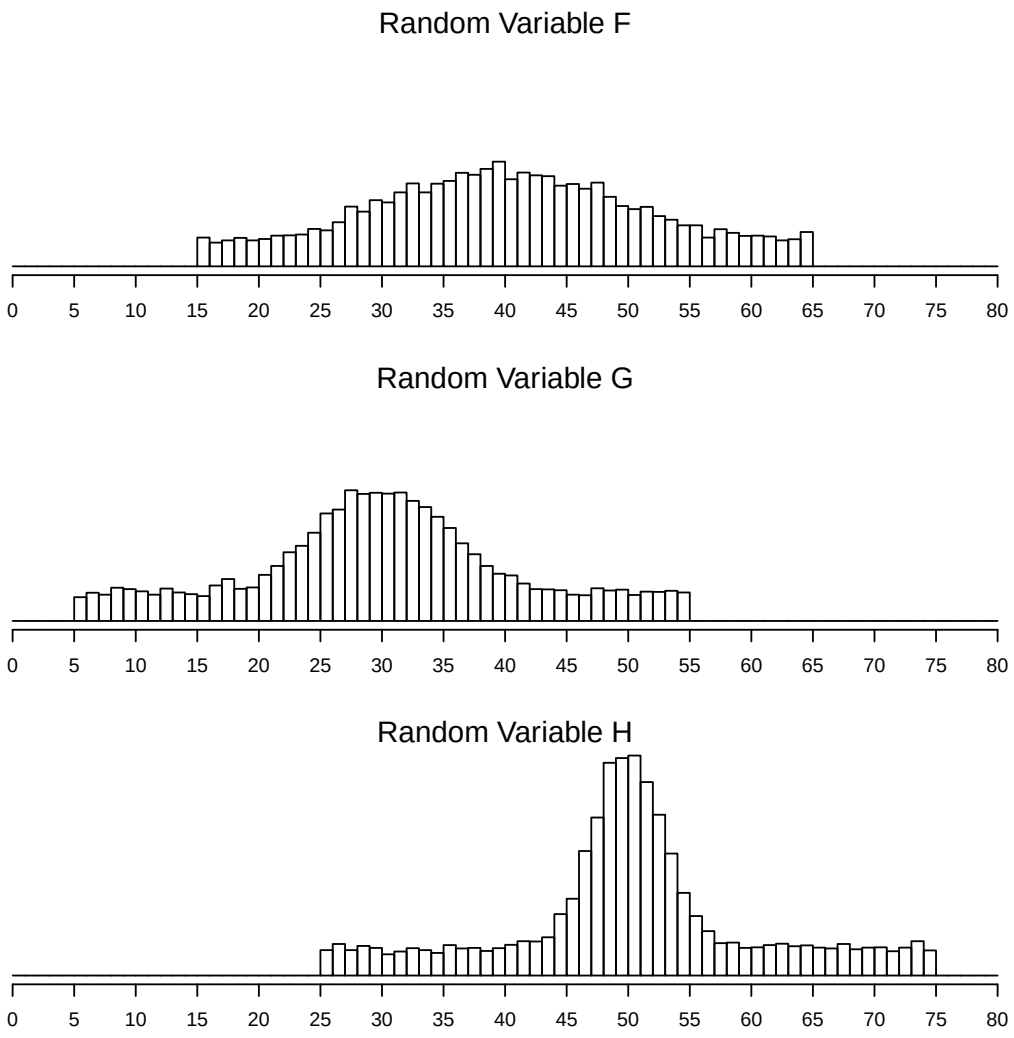
(a) Which distribution has the highest mean? (F, G, or H)

(b) Which distribution has the lowest mean? (F, G, or H)

(c) Which distribution has the largest standard deviation? (F, G, or H)

(d) Which distribution has the smallest standard deviation? (F, G, or H)

7. **Problem**
Three random variables (F, G, and H) were measured 1000 times each. The resulting histograms show the three distributions.



(a) Which distribution has the highest mean? (F, G, or H)

(b) Which distribution has the lowest mean? (F, G, or H)

(c) Which distribution has the largest standard deviation? (F, G, or H)

(d) Which distribution has the smallest standard deviation? (F, G, or H)

1. (a) 30
   (b) 20
   (c) 50
   (d) 20
   (e) 3.3333333
   (f) 5
2. (a) 40
   (b) 30
   (c) 50
   (d) 10
   (e) 5
   (f) 3.3333333
3. (a) F
   (b) H
   (c) H
   (d) F
4. (a) 20
   (b) 40
   (c) 30
   (d) 5
   (e) 20
   (f) 7.5
5. (a) 30
   (b) 40
   (c) 60
   (d) 3.3333333
   (e) 10
   (f) 5
6. (a) H
   (b) G
   (c) G
   (d) H
7. (a) H
   (b) G
   (c) F
   (d) H