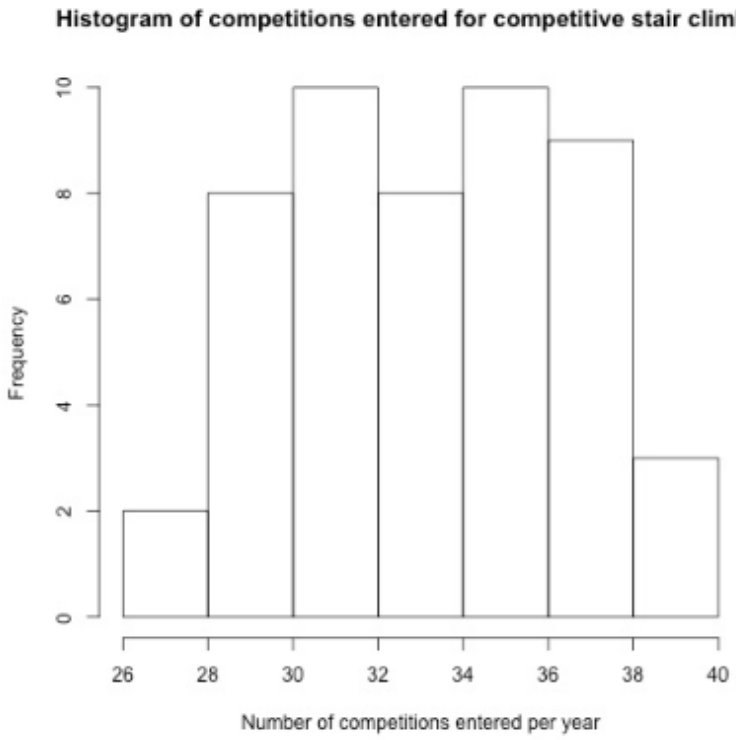
1. **Yanis is training for a stair climbing competition. He's interested in information from his training and those of his competitors. The below histogram shows the number of stair climbing competitions a random sample of 50 stair climbers entered in the past year.**



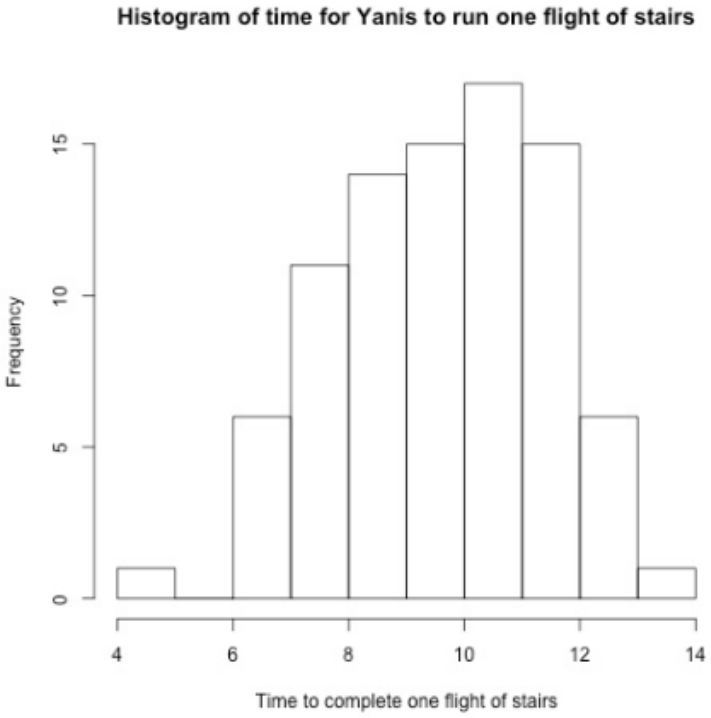
What is the shape of this distribution?

- (●) Uniform
- ( ) Skewed right
- ( ) Skewed left
- ( ) Bimodal
- ( ) Can't tell

✓ **Correct**

Good job! Because the number of values that fall in most of the bins are about the same, this appears to be roughly uniform.

2. **For his most recent training session, Yanis kept track of the time to complete each flight of stairs (16 steps). His distribution is shown here.**



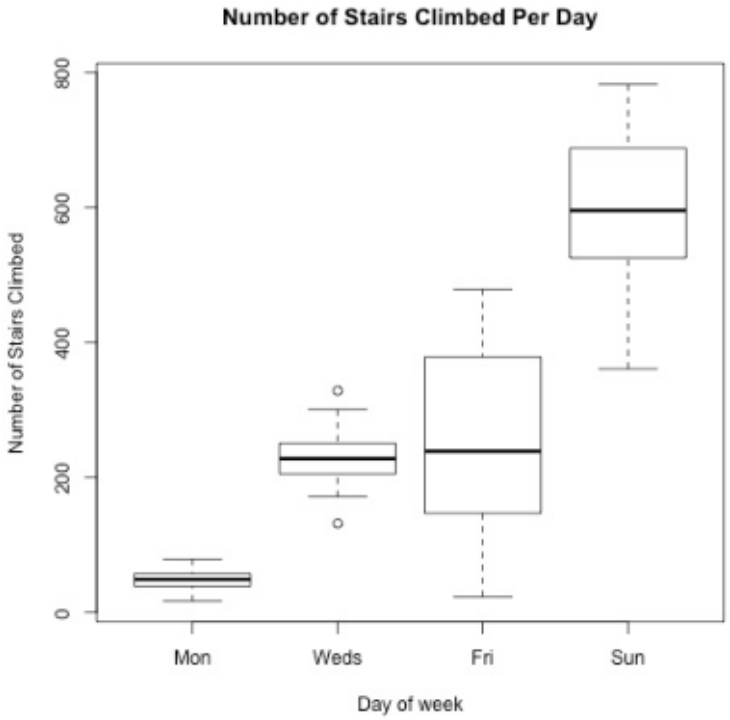
Which will be larger of time to complete each flight of stairs: the mean or the median?

- ○ The mean
- ◉ The median
- ○ They are the same
- ○ Can't tell

✓ **Correct**

Good job! Since this distribution is skewed left, the mean will be pulled to the right while the median remains larger.

3. **Yanis trains by climbing stairs 4 days out of the week. These box plots show the distribution of the number of flights of stairs climbed during his workouts for the past year. Which day of the week has the largest third quartile?**

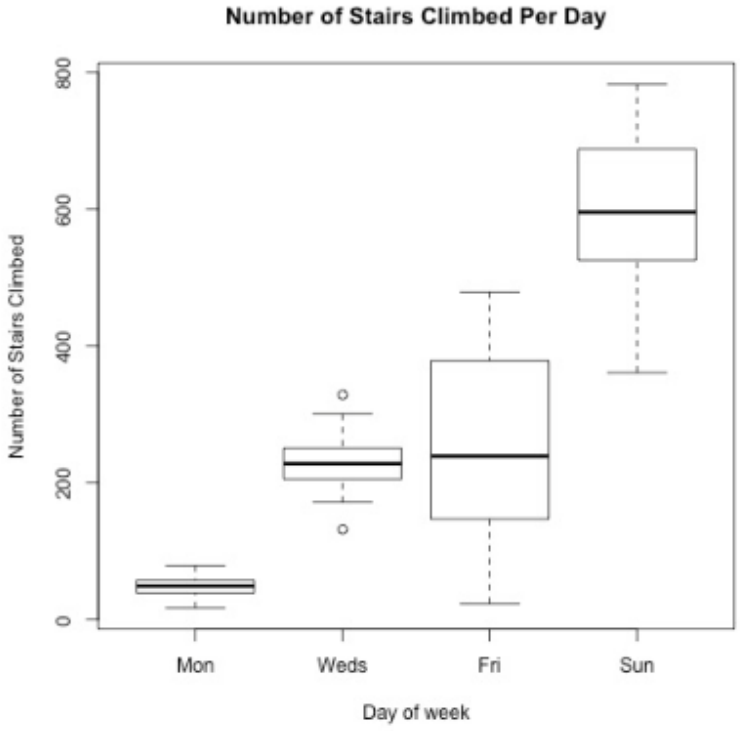


- ○ Monday
- ○ Wednesday
- ○ Friday
- ◉ Sunday
- ○ Can't tell

✓ **Correct**

Good job! The third quartile, which is represented by the top of the box, is the highest for Sunday.

4. **Yanis is interested in figuring out on which days his training is least consistent. Looking at the box plot of number of stairs climbed by day of the week, which day has the largest IQR?**

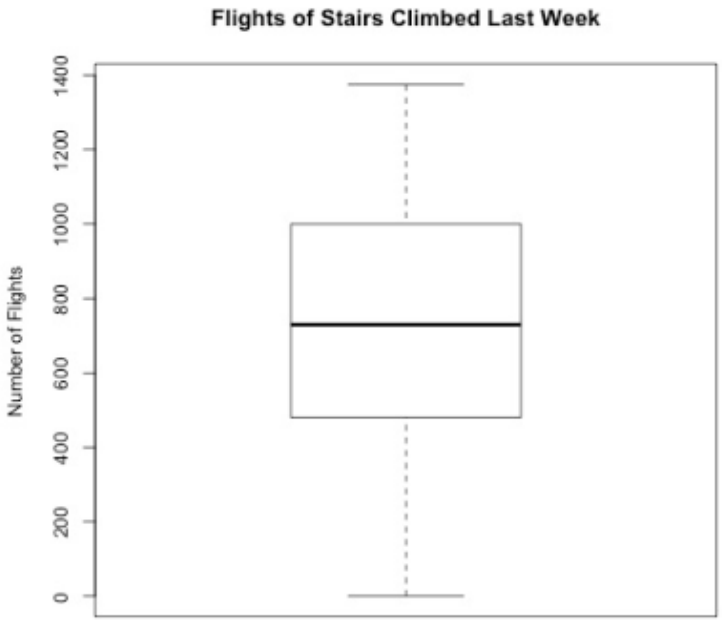


- ○ Monday
- ○ Wednesday
- ◉ Friday
- ○ Sunday
- ○ Can't tell

✓ **Correct**

Good job! The IQR is represented by the length of the box. The box for Friday is the widest.

5. **Yanis is able to see how many flights of stairs his competitors climb in a week. The box plot shows the distribution of the flights of stairs climbed by his competitors over the last week. Yanis climbed 1375 flights of stairs last week. Approximately what proportion of competitors climbed more flights of stairs than Yanis?**



- ○ 50%
- ○ 30%
- ○ 25%
- ○ 10%
- ◉ 0%
- ○ Can't tell

✓ **Correct**

Good job! The maximum is represented by the top of the whisker in this boxplot. The maximum appears to be around 1375, the number of flights of stairs climbed by Yanis. Thus, approximately 0% seem to have climbed more flights of stairs than Yanis in this week.