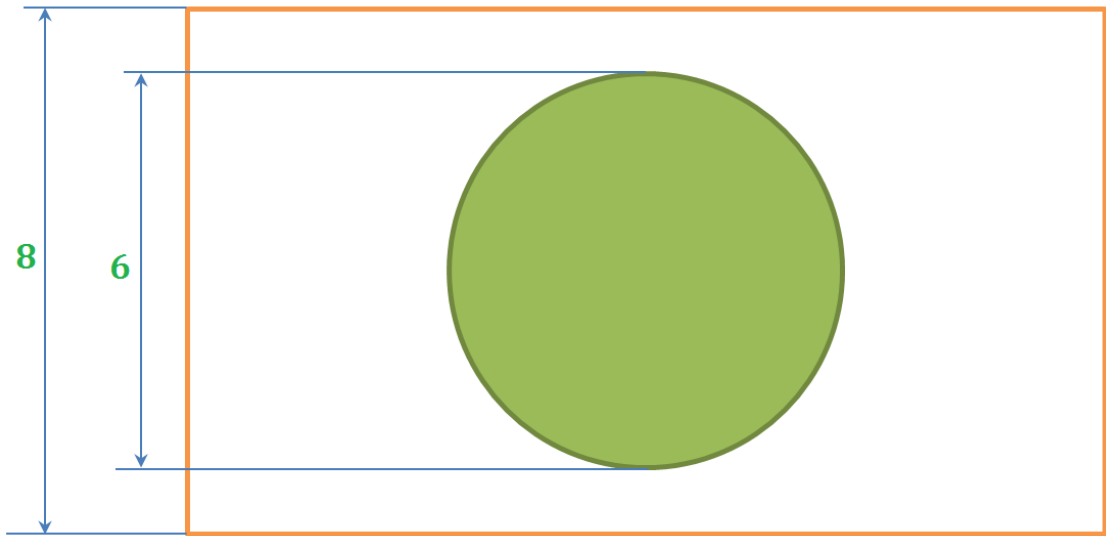**Solution.**

Height $= 8$ feet

Take away 1 foot from top **is 7 feet** then another foot from bottom **is 6 feet**.

So the diameter $= 6$ feet, then the radius $R = \frac{6}{2} = 3$ feet.

The area of the circle:

$$S = \pi R^2 = 3^2 \pi = 9\pi \text{ (feet)}$$

The circumference of the circle:

$$L = 2\pi R = 6\pi \text{ (feet)}$$

Answer: $R = 3$ feet; $S = 9\pi$ feet; $L = 6\pi$ feet.