Suppose you have a **large circular balloon** of radius 2ft. You would like to make it smaller, so you **let air out of the balloon at a constant rate** of $1\text{ft}^3/\text{sec}$. As you let air out, suppose the balloon shrinks but keeps its spherical shape.

Based on your own physical intuition of the world: as you continue letting air out of the balloon, does the **radius** of the balloon shrink:

- faster and faster?

- slower and slower?

- at a constant rate?