- A large spherical balloon is being inflated so that its radius, in feet, after t minutes is given by $r(t) = 2t + 3$. Find its volume as function of t.

$$\text{VOLUME OF SPHERE} = V(r) = \frac{4}{3}\pi r^3$$

$$r(t) = 2t + 3$$

$$V \text{ AS A FUNCTION OF } t \text{ IS } \quad V(r(t))$$

$$V(r(t)) = \frac{4}{3}\pi (2t + 3)^3$$