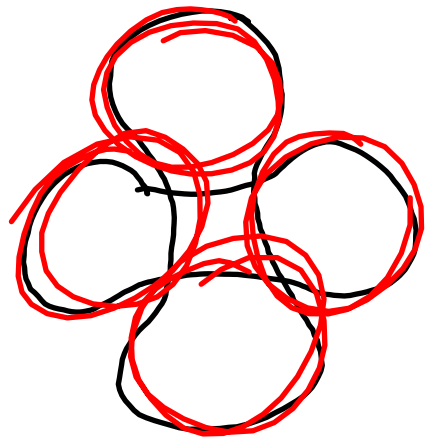


Surface Area/Volume of Sphere

- Surface Area = $4\pi r^2$



EX $\rightarrow r = 2 \text{ in.} \Rightarrow A = 4\pi(2)^2 = 16\pi \text{ in}^2$

EX $\rightarrow r = 6 \text{ m} \Rightarrow A = 4\pi(6)^2 = 144\pi \text{ m}^2$

EX $\rightarrow d = 22 \text{ in.} \Rightarrow A = 4\pi(11)^2 = 484\pi \text{ in}^2$

EX $\rightarrow d = 10 \text{ cm} \Rightarrow A = 4\pi(5)^2 = 100\pi \text{ cm}^2$

- Volume = $\frac{4}{3}\pi r^3$

EX $\rightarrow r = 2 \text{ in.} \Rightarrow V = \frac{4}{3}\pi(2)^3 = \frac{4}{3}\pi \cdot \frac{8}{1} = \frac{32}{3}\pi \text{ in}^3$

EX $\rightarrow r = 6 \text{ m} \Rightarrow V = \frac{4}{3}\pi(6)^3 = \frac{4}{3}\pi \cdot 216 = \frac{864}{3}\pi = 288\pi \text{ m}^3$

HW: p. 737 → 6-24 even, 30-40 even