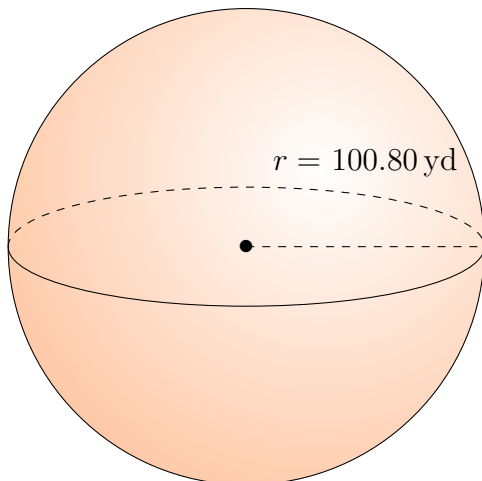# Surface Area and Volume of Spheres (F)
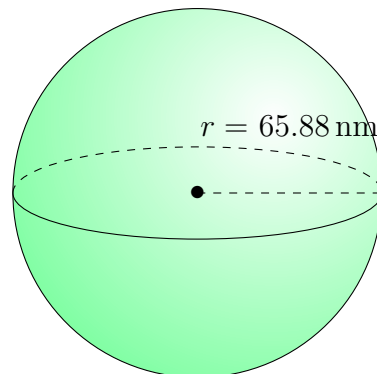
Calculate the surface area and volume for each sphere.

$$\text{Surface Area} = 4\pi r^2 \quad \text{Volume} = \frac{4}{3}\pi r^3$$
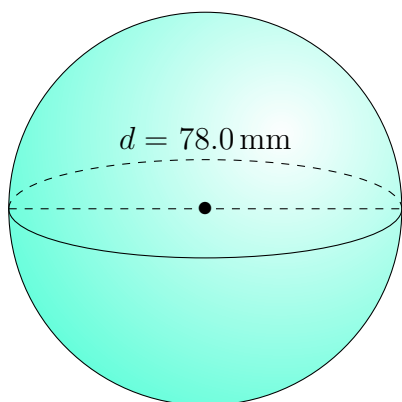
1.

$r = 100.80\,\text{yd}$

2.

$r = 65.88\,\text{nm}$
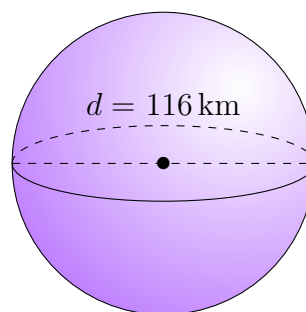
3.

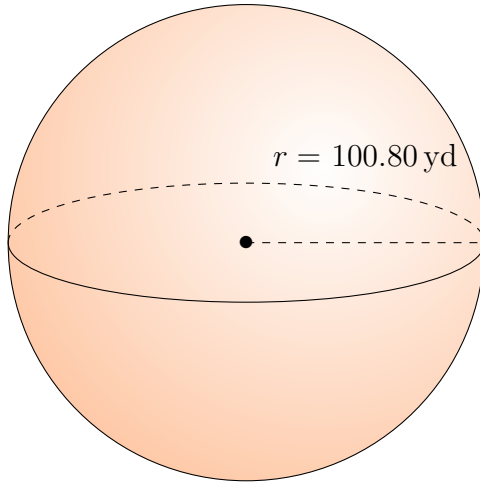$d = 78.0\,\text{mm}$

4.

$d = 116\,\text{km}$

Surface Area and Volume of Spheres (F) Answers

Calculate the surface area and volume for each sphere.

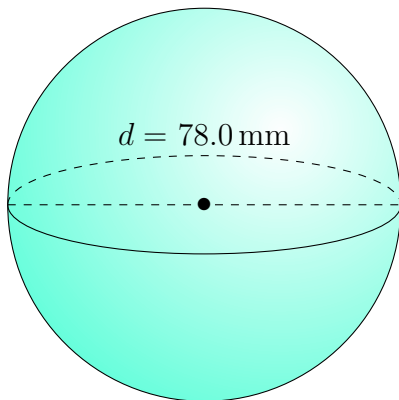$$\text{Surface Area} = 4\pi r^2 \quad \text{Volume} = \frac{4}{3}\pi r^3$$

1.

$r = 100.80\,\text{yd}$

Surface Area: $127{,}682.37\,\text{yd}^2$
Volume: $4{,}290{,}127.56\,\text{yd}^3$

2.

$r = 65.88\,\text{nm}$
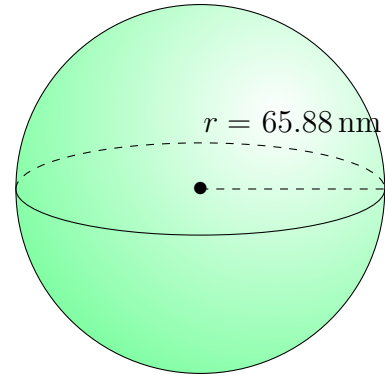
Surface Area: $54{,}540.24\,\text{nm}^2$
Volume: $1{,}197{,}703.67\,\text{nm}^3$

3.

$d = 78.0\,\text{mm}$

Surface Area: $19{,}113.4\,\text{mm}^2$
Volume: $248{,}474.8\,\text{mm}^3$

4.

$d = 116\,\text{km}$
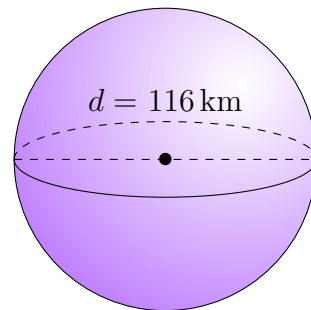
Surface Area: $42{,}273\,\text{km}^2$
Volume: $817{,}283\,\text{km}^3$