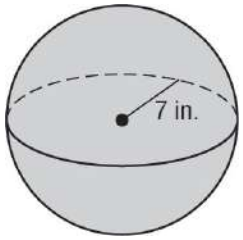
NAME DATE PERIOD

# Spheres & Spherical Geometry Practice Quiz

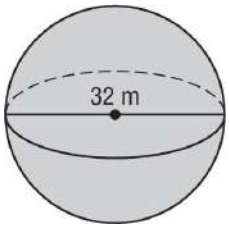
## *Spheres*

**Find the surface area of each sphere or hemisphere. Round to the nearest tenth.**

**1.**




**2.**

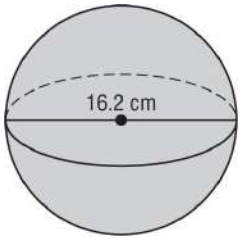



**3.** hemisphere: radius of great circle = 8 yd

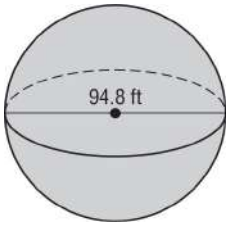
**4.** sphere: area of great circle ≈ 28.6 i $n^2$

**Find the volume of each sphere or hemisphere. Round to the nearest tenth.**

**5.**




**6.**




**7.** hemisphere: diameter of great circle = 48 yd

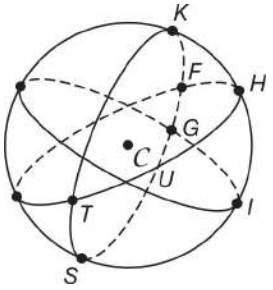
**8.** sphere: circumference of great circle ≈ 26 m

**9.** sphere: diameter = 10 in.

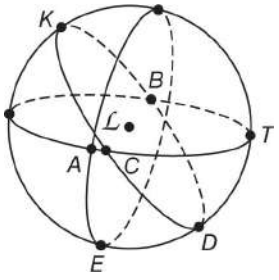
## *Spherical Geometry*

**Name two lines containing point *K*, a segment containing point *T*, and a triangle in each of the following spheres.**

**1.**

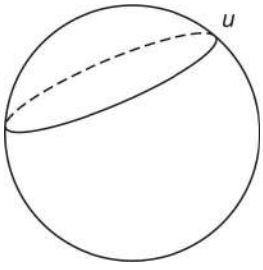



**2.**




**Determine whether figure *u* on each of the spheres shown is a line in spherical geometry.**

**3.**




**4.**


basketball

**Tell whether the following postulate or property of plane Euclidean geometry has a corresponding statement in spherical geometry. If so, write the corresponding statement. If not, explain your reasoning.**

**5.** If two lines form vertical angles, then the angles are equal in measure.

**6.** If two lines meet a third line at the same angle, those lines are parallel.

**7.** Two lines meet at two 90° angles or they meet at angles whose sum is 180°.