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| **Key Concept** | **Notes** |
| Sphere | Radius –  Diameter – |
| Surface Area |  |
| Problem 1 | What is the surface area of the sphere in terms of π? |
| Problem 2 |  |
| Volume |  |
| Problem 3 | What is the volume of the sphere in terms of π? |
| Problem 4 | The volume of a sphere is 5000 m3. What is its surface area to the nearest square meter? |

APPLICATION

The diameter of a sphere is 12 ft.

1. What is its surface area in terms of π? 2. What is its volume in terms of π?

3. The volume of a sphere is 80π cm3. What is the surface area rounded to the nearest tenth?

COMPREHENSION (2 POINTS!)

Your classmate claims that if you double the radius of a sphere, its surface area and volume will quadruple. What is your classmate’s error? EXPLAIN.