13.3 Independent Practice
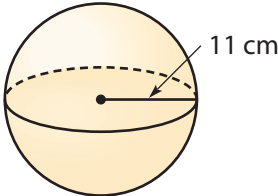
COMMON CORE 8.G.9

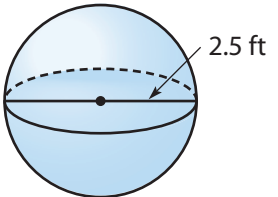**Find the volume of each sphere. Round your answers to the nearest tenth if necessary. Use 3.14 for π.**

11. radius of 3.1 meters _____

12. diameter of 18 inches _____

13. $r = 6$ in. _____

14. $d = 36$ m _____

15.

11 cm

_____

16.

2.5 ft

_____

The eggs of birds and other animals come in many different shapes and sizes. Eggs often have a shape that is nearly spherical. When this is true, you can use the formula for a sphere to find their volume.

17. The green turtle lays eggs that are approximately spherical with an average diameter of 4.5 centimeters. Each turtle lays an average of 113 eggs at one time. Find the total volume of these eggs, to the nearest cubic centimeter.

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18. Hummingbirds lay eggs that are nearly spherical and about 1 centimeter in diameter. Find the volume of an egg. Round your answer to the nearest tenth.

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19. Fossilized spherical eggs of dinosaurs called titanosaurid sauropods were found in Patagonia. These eggs were 15 centimeters in diameter. Find the volume of an egg. Round your answer to the nearest tenth.

_____

20. **Persevere in Problem Solving** An ostrich egg has about the same volume as a sphere with a diameter of 5 inches. If the eggshell is about $\frac{1}{12}$ inch thick, find the volume of just the shell, not including the interior of the egg. Round your answer to the nearest tenth.

_____

21. **Multistep** Write the steps you would use to find a formula for the volume of the figure at right. Then write the formula.

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