14a. Refer to Exercise 14 in Section 8.1.
   (a) Give the four letter English word which describes the shape of the geometric object given to you in Exercise 14.
   (b) The important parameters for determining the size of such a geometric shape are the radius of the circular base and the “height”, i.e., the perpendicular distance from the base to the vertex. Write the following sentences on your paper, with the blanks filled in appropriately for the shape given in Exercise 14:
   For the _____ shown (give the name of the geometric object). the radius of the base is _____ and the height is ______.
   (c) Continue ...
   Thus the volume of the object is ______________________________ (give the general formula for the volume, then substitute the appropriate numbers and do the calculation).
   (d) Explain how this can be used to check the answer to Exercise 14 which you obtained using calculus.

14b. Refer (again) to Exercise 14 in Section 8.1.
   (a) The object shown in Exercise 14 can be placed inside of a cylinder (more precisely, a right circular cylinder) so that the base of the object given in Ex. 14 is a base of the cylinder, and the height of the object is the height of the cylinder.
   Write the following sentence on your paper, with the blanks filled in appropriately for this cylinder:
   The volume of the cylinder is ______________________________ (give the general formula for the volume, then substitute the appropriate numbers and do the calculation).
   (b) Explain how this can be used to check (partially) the answer to Exercise 14 which you obtained using calculus.

16. Refer to Exercise 16 in Section 8.1.
   (a) Give the eight letter English word which describes the shape of a geometric object for which the object given in Exercise 16 is half of such a general object.
   (b) The important parameters for determining the size of such a geometric shape are the radius of the circular base and the “height”, i.e., the perpendicular distance from the base to the vertex. Write the following sentences on your paper, with the blanks filled in appropriately for the shape given in Exercise 16:
   For the object shown in Exercise 16, the radius of the base is _____ and the height is ______.
   (c) Continue ...
   Thus the volume is ______________________________ (give the general formula for the volume of the object in Ex. 16, then substitute the appropriate numbers and do the calculation).
   (d) Explain how this can be used to check the answer to Exercise 16 which you obtained using calculus.