

**Objectives:**

Using the **VOL/SA2** applet, the student will calculate volumes and surface areas for three dimensional shapes of the box and the cylinder.

**Functionality:**

When the applet **STARTS**, the **VOL/SA2 NOTE** will be displayed.

The student should then go to the **SKETCH** to see a visual display of the shapes and the dimensions as they will appear throughout the applet.

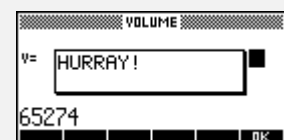
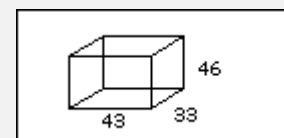
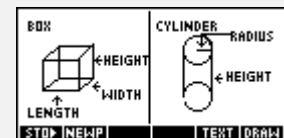
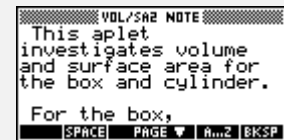
There are two sets of views screens for this applet. The first **VIEW** lets the student select the shape of Box or Cylinder.

After a choice of shape has been made the applet generates a picture which includes values for each of the dimensions. Pressing any key takes the student to the next set of views.

The next set of **VIEW** allows the student to enter a value for the volume or the surface area, or choose to return to the picture or the main menu. The student should choose the main menu only when the problem has been completed.

Once the student makes a choice of volume or area, an input window appears. The student enters a value and a message box displays **HURRAY!**, or **TOO LOW**, or **TOO HIGH** depending upon the values.

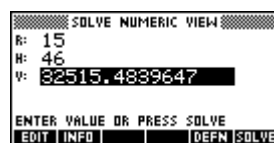
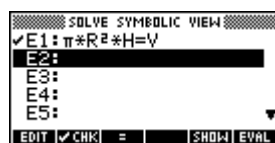
Press **OK** to return to the views box so that the student can access the options to enter a value for surface area or volume. Returning to the picture remains an option until the Main Menu choice is executed.



**Additional Exploration:**

The **Solve** applet may be used to enter formulas for volume and surface area. Enter the volume & surface area formulas in the **Symbolic View**. Enter known values in the **Numeric View**, highlight the unknown and then press **SOLVE**.

Eg: Find the volume of a cylinder with a radius of 15 cm and a height of 46 cm.



Programs associated with this applet:

- .VOL.SA2, .VOL.SH, .VOL.CY, .VOL.P, .VOL.C1, .VOL.C3, .VOL.V1, .VOL.V, .VOL.SA, .VOL.SV1