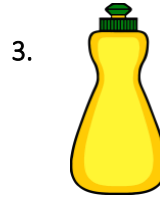


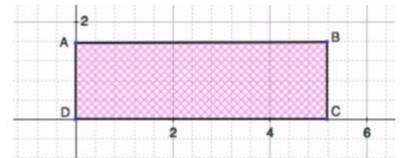
11-3 Revolutions

Homework

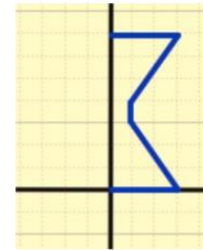
For each of the following solids, draw the two-dimensional shape that would be revolved about the x-axis to generate it.



5. Name something in your house that would be shaped like the solid of revolution formed, if the figure on the right were to be rotated about the x-axis.



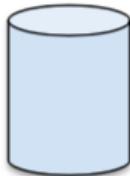
6. Name something in the world that would be shaped like the solid of revolution formed if the figure on the right were to be rotated about the y-axis.



Find the Volume of the solids.

7. $r = 3$ inches, $h = 10$ inches

cylinder



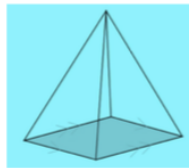
8. $r = 8$ cm, $H = 20$ cm

right circular cone



9. $h = \frac{5\sqrt{2}}{2}m$, $l = 3\sqrt{5}m$

square pyramid



10. $h = 12$ in, $a = 5\sqrt{7}$ in,
 $b = 2\sqrt{7}$ in.

square frustum



11. The following picture is a cross-section of a nail. Use this correctly scaled drawing to find the volume of the nail, treating it as a solid of revolution. All units are in inches.

