Volumes of Prisms

Example: Find the volume of the cylinder with a radius of 4" and height 10".

$V = \pi\, r^2 H$
$= \pi\, 4^2\,(10)$
$= 16\pi\,(10)$
$= 160\pi$ cubic "

1. Draw and find the volume of a rectangular prism with base 10 ft by 6 ft and height 5 feet.

2. Draw and find the volume of a cylinder with radius 6cm and height 5 cm.

3. Draw and find the volume of a triangular prism with the base of the triangle 8 in. and the height of the triangle 6 in and the height (H) of the prism 10 in.

4. Draw and find the height (H) of a cylinder with volume 80π cu. In. and radius of 4 in.

5. Draw and find the volume of a sphere with radius 3 yd.

6. Find the radius of a sphere with radius 3 mm. and volume 36π cu mm.

7. Find the volume of the cylinder with height 20 cm. and diameter 6 cm.

6 cm

20 cm

8. Find the base of a triangular prism if the height (h) of the triangle is 4 cm, the height (H) of the triangular prism is 10 cm and the volume is 120 cu. cm.