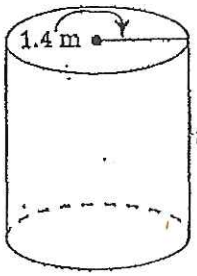
Integrated 1 Name: Key

Volume of Cylinders: Evaluate the Volume of each cylinder. Show all of your work.

Formula:

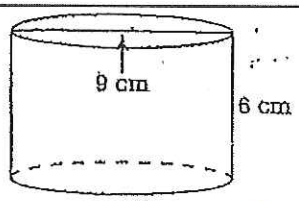
$$V_{cy} = \pi r^2 h$$

1) 

$V_{cy} = \pi (1.4m)^2 \cdot 3m$

$V_{cy} = 5.88\pi\ m^3$

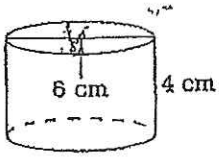
$V_{cy} = 18.5\ m^3$

2) 

$V_{cy} = \pi (4.5cm)^2 \cdot 6cm$

$V_{cy} = 121.5\pi\ cm^3$

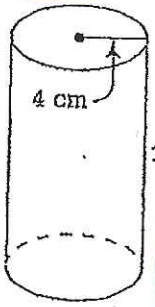
$V_{cy} = 381.7\ cm^3$

3) 

$V_{cy} = \pi (3\ cm)^2 \cdot 4cm$

$V_{cy} = 36\pi\ cm^3$

$V_{cy} = 113.1\ cm^3$

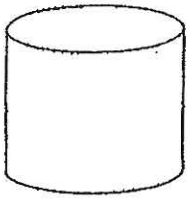
4) 

$V_{cy} = \pi (4cm)^2 \cdot 14cm$

$V_{cy} = 224\pi\ cm^3$

$V_{cy} = 703.7\ cm^3$

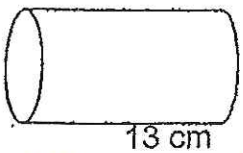
5) Diameter = 22 cm



$V_{cy} = \pi (11cm)^2 \cdot 35cm$ r = 4 cm

$V_{cy} = 4{,}235\pi\ cm^3$

$V_{cy} = 13{,}304.6\ cm^3$

6) 

$V_{cy} = \pi (4cm)^2 \cdot 13cm$

$V_{cy} = 208\pi\ cm^3$

$653.5\ cm^3$