Mathématique Appliquée/Pré-Calcul 20S

Revue Les ~~sphères~~ cylindres

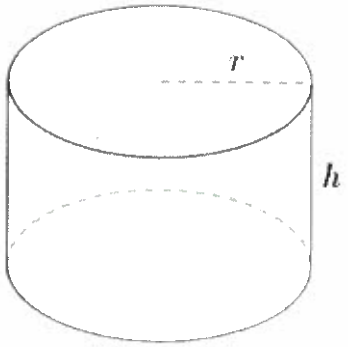
Nom : _____ Date : _____

$Aire\ cyclindre = 2\pi r^2 + 2\pi rh$

aire base + aire latérale

$Volume\ cyclindre = \pi r^2 h$

1.

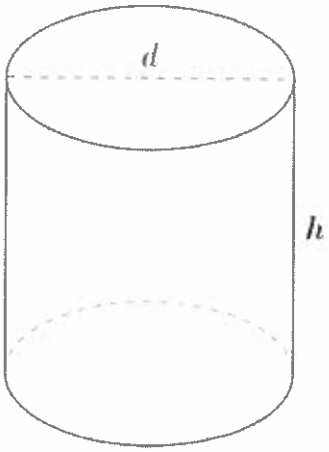


$r = 5{,}7$ km $h = 6{,}9$ km

Aire =

Volume =

2.



r = 5,4

$d = 10{,}8$ dm $h = 11{,}1$ dm

Aire =

Volume =

$Aire = 2\pi \cdot 5{,}7^2 + 2\pi \cdot 5{,}7 \cdot 6{,}9$

$= 451{,}26\ km^2$

$V = \pi \cdot 5{,}7^2 \cdot 6{,}9$

$V = 704{,}29\ km^3$

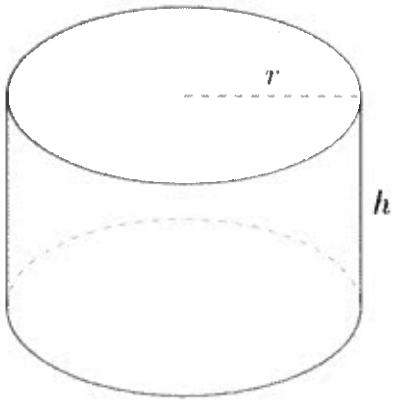
$A = 2 \cdot \pi \cdot 5{,}4^2 + 2 \cdot \pi \cdot 5{,}4 \cdot 11{,}1$

$A = 559{,}83\ dm^2$

$V = \pi \cdot 5{,}4^2 \cdot 11{,}1$

$V = 1016{,}86\ dm^3$

3.



$r = 11{,}25$ dam $\quad h = 13{,}5$ dam

Aire =

Volume =

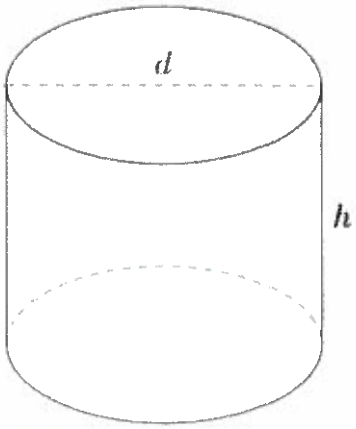
$A = 2 \cdot \pi \cdot 11{,}25^2 + 2 \cdot \pi \cdot 11{,}25 \cdot 13{,}5$

$A = 1749{,}47 \text{ dam}^2$

$V = \pi \cdot 11{,}25^2 \cdot 13{,}5$

$V = 5367{,}71 \text{ dam}^3$

4.



$r = 8$ mi

$d = 16$ mi $\quad h = 13{,}2$ mi

Aire =

Volume =

$A = 2 \cdot \pi \cdot 8^2 + 2 \cdot \pi \cdot 8 \cdot 13{,}2$

$A = 1065{,}63 \text{ mi}^2$

$V = \pi \cdot 8^2 \cdot 13{,}2$

$V = 2654{,}02 \text{ mi}^3$