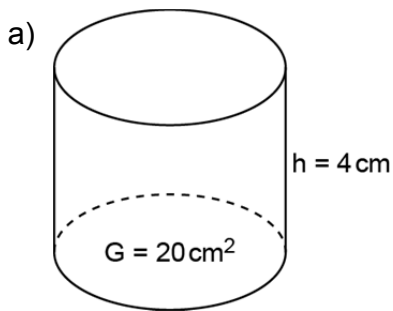


Zylinder. Volumen

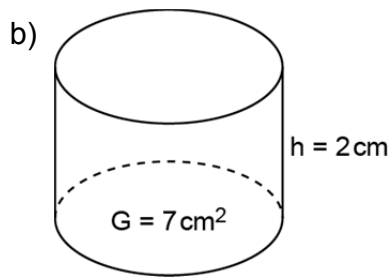
1 Berechne das Volumen des Zylinders.



$V = G \cdot h$

$V = 20 \cdot 4$

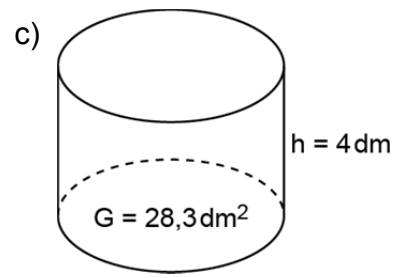
$V = 80 \text{ cm}^3$



$V = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$

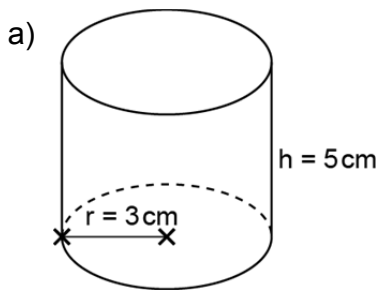


$V = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$

2 Berechne zuerst die Grundfläche und dann das Volumen des Zylinders.



$G = \pi \cdot r^2$

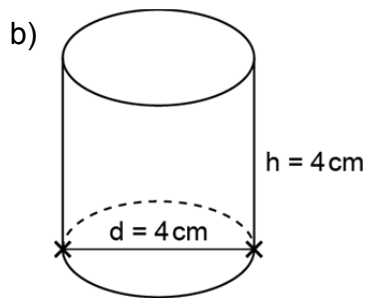
$G = \pi \cdot 3^2$

$G = 28,27 \text{ cm}^2$

$V = G \cdot h$

$V = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$



$G = \underline{\hspace{2cm}}$

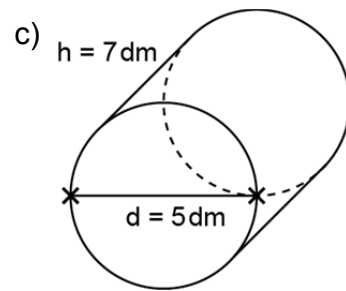
$G = \underline{\hspace{2cm}}$

$G = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$



$G = \underline{\hspace{2cm}}$

$G = \underline{\hspace{2cm}}$

$G = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$

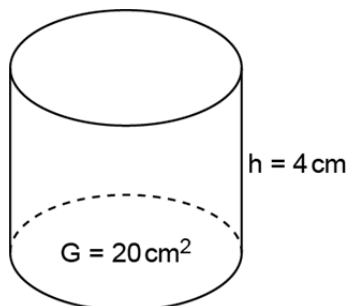
$V = \underline{\hspace{2cm}}$

$V = \underline{\hspace{2cm}}$

Zylinder. Volumen – Lösung

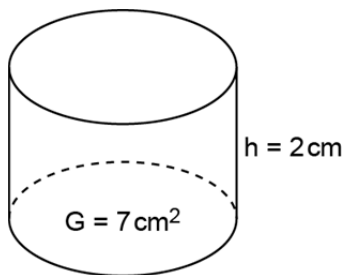
1

a)



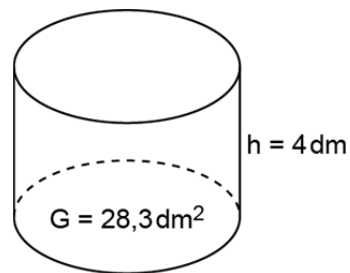
$$\begin{aligned} V &= G \cdot h \\ V &= 20 \cdot 4 \\ V &= 80 \text{ cm}^3 \end{aligned}$$

b)



$$\begin{aligned} V &= G \cdot h \\ V &= 7 \cdot 2 \\ V &= 14 \text{ cm}^3 \end{aligned}$$

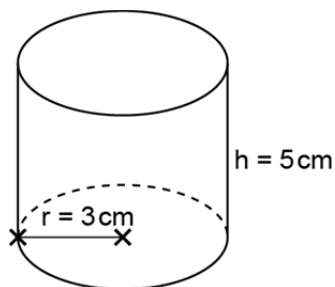
c)



$$\begin{aligned} V &= G \cdot h \\ V &= 28,3 \cdot 4 \\ V &= 113,2 \text{ dm}^3 \end{aligned}$$

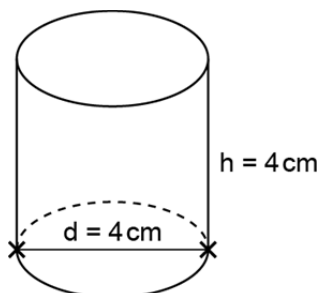
2

a)



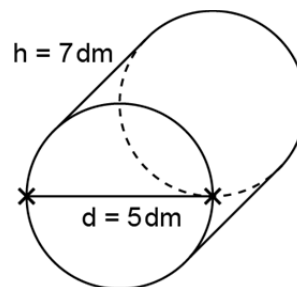
$$\begin{aligned} G &= \pi \cdot r^2 \\ G &= \pi \cdot 3^2 \\ G &= 28,27 \text{ cm}^2 \\ \\ V &= G \cdot h \\ V &= 28,27 \cdot 5 \\ V &= 141,35 \text{ cm}^3 \end{aligned}$$

b)



$$\begin{aligned} G &= \pi \cdot r^2 \\ G &= \pi \cdot 2^2 \\ G &= 12,57 \text{ cm}^2 \\ \\ V &= G \cdot h \\ V &= 12,57 \cdot 4 \\ V &= 50,28 \text{ cm}^3 \end{aligned}$$

c)



$$\begin{aligned} G &= \pi \cdot r^2 \\ G &= \pi \cdot 2,5^2 \\ G &= 19,63 \text{ dm}^2 \\ \\ V &= G \cdot h \\ V &= 19,63 \cdot 7 \\ V &= 137,41 \text{ dm}^3 \end{aligned}$$