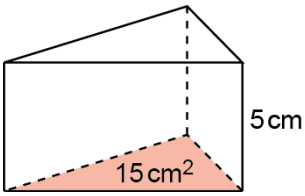
Volumen

1 Berechne das Volumen des Prismas wie im Beispiel a).

a)

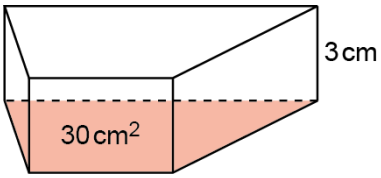


V = $G \cdot h$

V = $15 \cdot 5$

V = $75\,cm^2$

b)

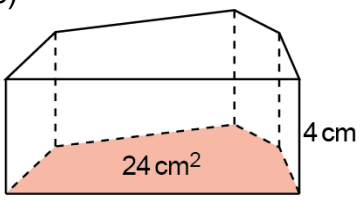


V = _____

V = _____

V = _____

c)

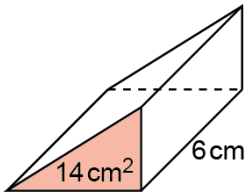


V = _____

V = _____

V = _____

d)

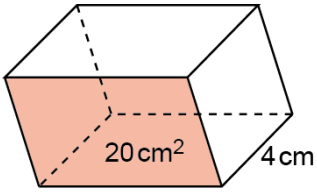


V = _____

V = _____

V = _____

e)

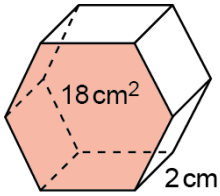


V = _____

V = _____

V = _____

f)



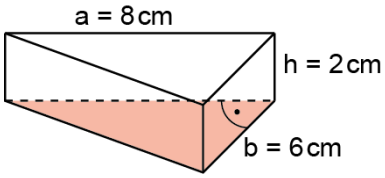
V = _____

V = _____

V = _____

2 Berechne zuerst den Grundflächeninhalt und dann das Volumen des Prismas.

a)



G = $\frac{1}{2} \cdot a \cdot b$

G = $\frac{1}{2} \cdot 8 \cdot 6$

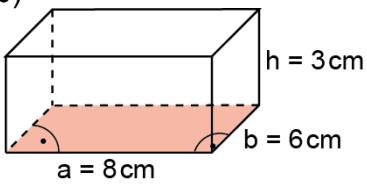
G = $24\,cm^2$

V = _____

V = _____

V = _____

b)



G = _____

G = _____

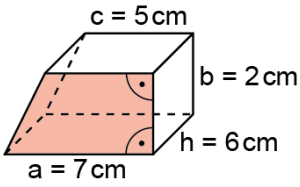
G = _____

V = _____

V = _____

V = _____

c)



G = _____

G = _____

G = _____

V = _____

V = _____

V = _____

Prismen | Fördern

Volumen – Lösung

1

a) $V = G \cdot h$
$V = 15 \cdot 5$
$V = 75\,cm^2$

b) $V = \mathbf{G \cdot h}$
$V = \mathbf{30 \cdot 3}$
$V = \mathbf{90\,cm^2}$

c) $V = \mathbf{G \cdot h}$
$V = \mathbf{24 \cdot 4}$
$V = \mathbf{96\,cm^2}$

d) $V = \mathbf{G \cdot h}$
$V = \mathbf{14 \cdot 6}$
$V = \mathbf{84\,cm^2}$

e) $V = \mathbf{G \cdot h}$
$V = \mathbf{20 \cdot 4}$
$V = \mathbf{80\,cm^2}$

f) $V = \mathbf{G \cdot h}$
$V = \mathbf{18 \cdot 2}$
$V = \mathbf{36\,cm^2}$

2

a) $G = \frac{1}{2} \cdot a \cdot b$
$G = \frac{1}{2} \cdot 8 \cdot 6$
$G = 24\,cm^2$
$V = \mathbf{G \cdot h}$
$V = \mathbf{24 \cdot 2}$
$V = \mathbf{48\,cm^3}$

b) $G = \mathbf{a \cdot b}$
$G = \mathbf{8 \cdot 6}$
$G = \mathbf{48\,cm^2}$
$V = \mathbf{G \cdot h}$
$V = \mathbf{48 \cdot 3}$
$V = \mathbf{144\,cm^3}$

c) $G = \mathbf{\frac{1}{2} \cdot (a + c) \cdot b}$
$G = \mathbf{\frac{1}{2} \cdot (7 + 5) \cdot 2}$
$G = \mathbf{12\,cm^2}$
$V = \mathbf{G \cdot h}$
$V = \mathbf{12 \cdot 6}$
$V = \mathbf{72\,cm^3}$