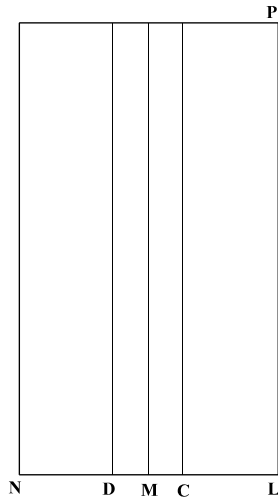


## Sterbank

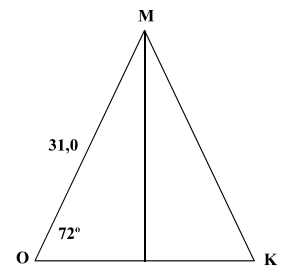
5.  $\angle CDM = 180^\circ - \angle CDE = 180 - 108 = 72^\circ$   
 $\angle DCM = \angle CDM = 72^\circ$   
 $\angle DCM = 180^\circ - 72^\circ - 72^\circ = 36^\circ$

6. (wel op schaal,  
niet schaal 1 : 20)



7. Hoogte h van de bank is hoogte driehoek OMK  
 $OM = KM = 31,0 + 19,16 + 31,0 = 81,16 \text{ cm}$   
 $\angle MOK = 72^\circ$

$$\sin 72^\circ = \frac{h}{OM} \quad h = OM \cdot \sin 72^\circ = 81,16 \cdot \sin 72^\circ \approx 77 \text{ cm}$$



8.  $\text{Opp } \Delta DCM = \frac{1}{2} \cdot 19,16 \cdot (31,0 \cdot \sin 72^\circ) \approx 282$   
 $\angle CBQ = \frac{1}{2} \cdot 108^\circ = 54^\circ$        $CQ = \frac{1}{2} \cdot 31,0 = 15,5$

$$\tan(54^\circ) = \frac{15,5}{BQ} \rightarrow BQ = \frac{15,5}{\tan 54^\circ}$$

$$\text{Oppervlakte } \Delta ABC = \frac{1}{2} \cdot 31,0 \cdot \frac{15,5}{\tan 54^\circ} \approx 174,6$$

$$\text{Oppervlakte ster} = 6 \cdot \text{oppervlakte } \Delta DCM + 2 \cdot \text{oppervlakte } \Delta ABC$$

$$= 6 \cdot 282,4 + 2 \cdot 174,6 \approx 2044 \text{ cm}^2$$

$$\text{Inhoud prisma} = 2044 \cdot 140 \approx 286160 \text{ cm}^3 \approx 286 \text{ dm}^3$$

