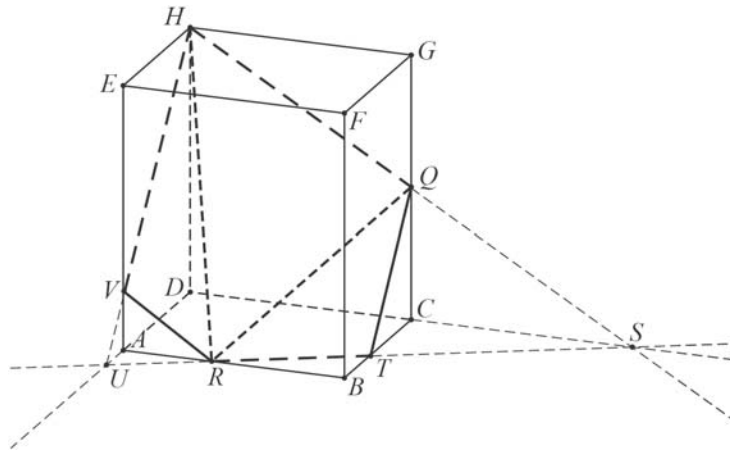


**Balk en piramide**

6.



7. Inhoud piramide =  $\frac{1}{3} \cdot \text{oppervlakte grondvlak} \cdot \text{hoogte}$   
 hoogte = AD = 4  
 oppervlakte grondvlak  $\Delta DHQ = \frac{1}{2} \cdot DH \cdot CD = \frac{1}{2} \cdot 6 \cdot 5 = 15$   
 Inhoud =  $\frac{1}{3} \cdot 15 \cdot 4 = 20$

8.  $DQ = HQ = \sqrt{3^2 + 5^2} = \sqrt{34} \approx 5,8$   
 $DR = \sqrt{4^2 + 2^2} = \sqrt{20} \approx 4,5$   
 $CR = \sqrt{3^2 + 4^2} = \sqrt{25} = 5$   
 $RQ = \sqrt{5^2 + 3^2} = \sqrt{34} \approx 5,8$

9. X is het midden van DR  
 $\Delta DRQ$  is gelijkbenig  
 $DR = \sqrt{20}$       $DX = \frac{1}{2}\sqrt{20} = \sqrt{5}$   
 $QX = \sqrt{\sqrt{34}^2 - \sqrt{5}^2} = \sqrt{29}$   
 Gevraagde hoek:  $\angle QXC$   
 $\sin \angle QXC = \frac{3}{\sqrt{29}}$   
 $\angle QXC = \sin^{-1}\left(\frac{3}{\sqrt{29}}\right) \approx 34^\circ$

