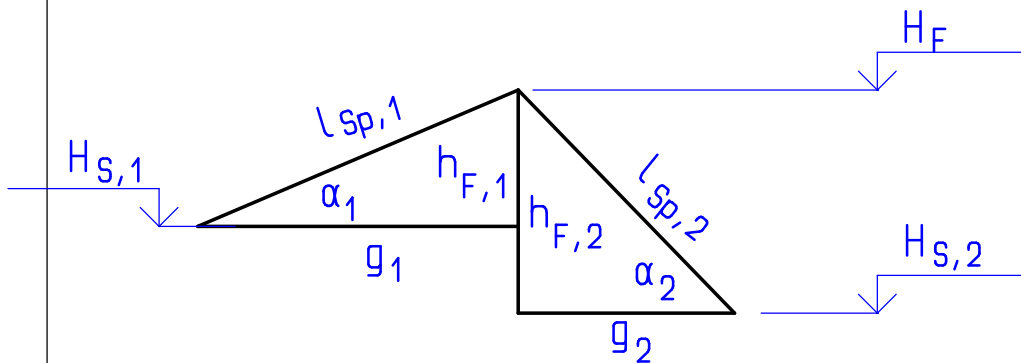


Geg.: Einhüftiges Satteldach, Dachbreite 7,10m;

$$H_{S,1} = +4,20; H_F = +6,00; \alpha_1 = 23^\circ; H_{S,2} = +3,05.$$

Ges.: Skizze, Grundmaße, Sparrenlängen und α_2 .



$$h_{F,1} = H_F - H_{S,1} = 6,00 - 4,20 = \underline{\underline{1,80m}}$$

$$g_1 = \frac{GK}{\tan \alpha} = \frac{1,80}{\tan 23^\circ} = \underline{\underline{4,241m}}$$

$$l_{sp,1} = \frac{GK}{\sin \alpha} = \frac{1,80}{\sin 23^\circ} = \underline{\underline{4,607m}}$$

$$g_2 = b - g_1 = 7,10 - 4,241 = \underline{\underline{2,859m}}$$

$$h_{F,2} = H_F - H_{S,2} = 6,00 - 3,05 = \underline{\underline{2,95m}}$$

$$\alpha_2 = \tan^{-1} \frac{GK}{AK} = \tan^{-1} \frac{2,95}{2,859} = \underline{\underline{45,893^\circ}}$$

$$l_{sp,2} = \frac{GK}{\sin \alpha} = \frac{2,95}{\sin 45,893^\circ} = \underline{\underline{4,108m}}$$