

$$\begin{aligned}
 A.M. BE &= BD \cdot AB - BD \cdot BE \\
 BE(A.M. + BD) &= BD \cdot AB \\
 BE &= \frac{BD \cdot AB}{A.M. + BD}
 \end{aligned}$$

$$\begin{aligned}
 \text{also } \sin \alpha_1 &= \frac{BD(A.M. + BD)}{BD \cdot AB} \\
 &= \frac{A.M. + BD}{AB}
 \end{aligned}$$

$$\begin{aligned}
 \text{Da nun } AB &= 4, \text{ Fuß} \\
 A.M. &= 1\frac{1}{2} \text{ ,} \\
 BD &= 10 \text{ ,}
 \end{aligned}$$

ist, so wird

$$\sin \alpha_1 = \frac{1\frac{1}{2} + 10}{4} = \frac{11\frac{1}{2}}{4} = 2,875$$

$$\text{Daher } \alpha_1 = 70^\circ 49' 15''$$

Daher α_2 und α_3

$$\begin{aligned}
 \alpha &= 90^\circ - 70^\circ 49' 15'' \\
 &= 19^\circ 10' 45''
 \end{aligned}$$