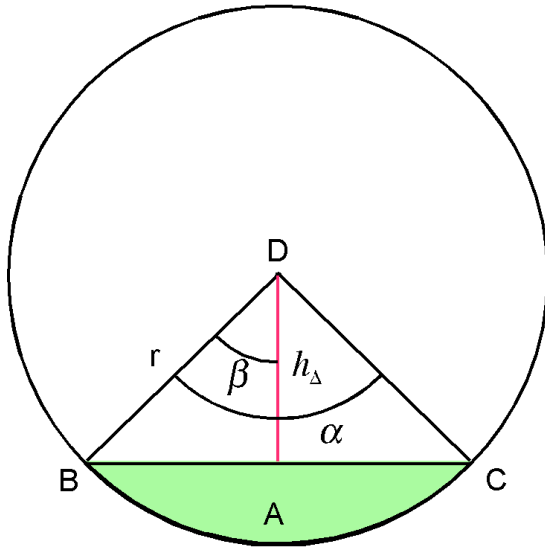


Der Segmentinhalt
gemäss Formelbuch „Formeln Tabellen Begriffe“
Seite 92



$$A = F_{\text{Sektor}} - F_{\text{Dreieck}}$$

$$A = \pi \cdot r^2 \frac{\alpha}{360^\circ} - \frac{1}{2} \cdot h_\Delta \cdot \overline{BC} \quad \wedge \quad \frac{\alpha}{360^\circ} = \frac{b}{2\pi} \quad \wedge \quad h_\Delta = r \cos \beta$$

$$\overline{BC} = 2r \sin \beta$$

$$A = \pi \cdot r^2 \frac{b}{2\pi} - \frac{1}{2} \cdot r \cos \beta \cdot 2r \sin \beta$$

$$A = \pi \cdot r^2 \frac{b}{2\pi} - \frac{1}{2} \cdot r \cos \beta \cdot 2r \sin \beta \quad \wedge \quad 2 \cos \beta \cdot \sin \beta = \sin 2\beta = \sin \alpha$$

$$A = \frac{r^2}{2} (b - \sin 2\beta)$$

$$A = \frac{r^2}{2} (b - \sin \alpha) \quad \wedge \quad b = \text{arc } \alpha$$

$$A = \frac{r^2}{2} (\text{arc } \alpha - \sin \alpha)$$