$$\frac{AB}{\operatorname{sen}(\pi-\hat{C})} = \frac{AM}{\operatorname{sen}\theta} \qquad AM = c \cdot \frac{\operatorname{sen}\left(\frac{\hat{C}-\hat{B}}{2}\right)}{\operatorname{sen}\hat{C}}$$

$$AM^2 = x^2 + AN^2$$

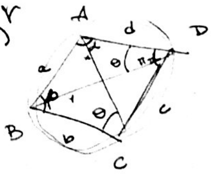
$$\boxed{AN^2 = c^2 \cdot \frac{\operatorname{sen}^2\left(\frac{\hat{C}-\hat{B}}{2}\right)}{\operatorname{sen}^2\hat{C}} - x^2}$$

$$BN = c - AN \quad \ldots$$

$$AN + AC = \sqrt{c^2 \cdot \frac{\operatorname{sen}^2\left(\frac{C-B}{2}\right)}{\operatorname{sen}^2 C} - x^2} + c \cdot \frac{\operatorname{sen}B}{\operatorname{sen}C}$$

. . . ?. .

3.33) ✓



ABD:

$$\frac{a}{\operatorname{sen}\theta} = \frac{y}{\operatorname{sen}\alpha}$$

ABC:

$$\frac{a}{\operatorname{sen}\theta} = \frac{x}{\operatorname{sen}\beta}$$

$$\Rightarrow \quad \frac{x}{\operatorname{sen}\beta} = \frac{y}{\operatorname{sen}\alpha}$$

$$\frac{x}{y} = \frac{\operatorname{sen}\beta}{\operatorname{sen}\alpha}$$

$$A(ABCD) = \frac{a \cdot d\operatorname{sen}\alpha}{2} + \frac{b \cdot c\operatorname{sen}(\pi-\alpha)}{2}$$

$$= \frac{a \cdot b\operatorname{sen}\beta}{2} + \frac{d \cdot c\operatorname{sen}(\pi-\beta)}{2}$$

. . .

3.35) ✓

teo cordas

$$AM \cdot A_1M = BM \cdot CM$$

$$ma \cdot x = BM^2 \left(\frac{a}{2}\right)^2$$

$$ma + x = AA_1 \leq 2R$$

$$a^2 + 4ma^2 = 2(b^2 + c^2)$$

$$b^2 + 4mb^2 = 2(a^2 + c^2)$$

$$c^2 + 4mc^2 = 2(a^2 + b^2)$$

$$x = \frac{a^2}{4ma}$$

$$ma + \frac{a^2}{4ma} \leq 2R$$

$$\frac{a^2}{4ma} + ma = \frac{b^2 + c^2}{2ma}$$