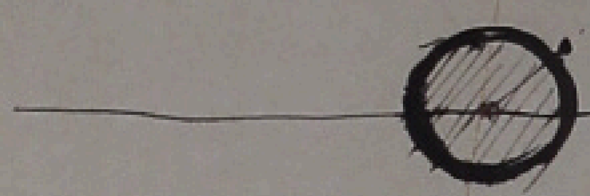
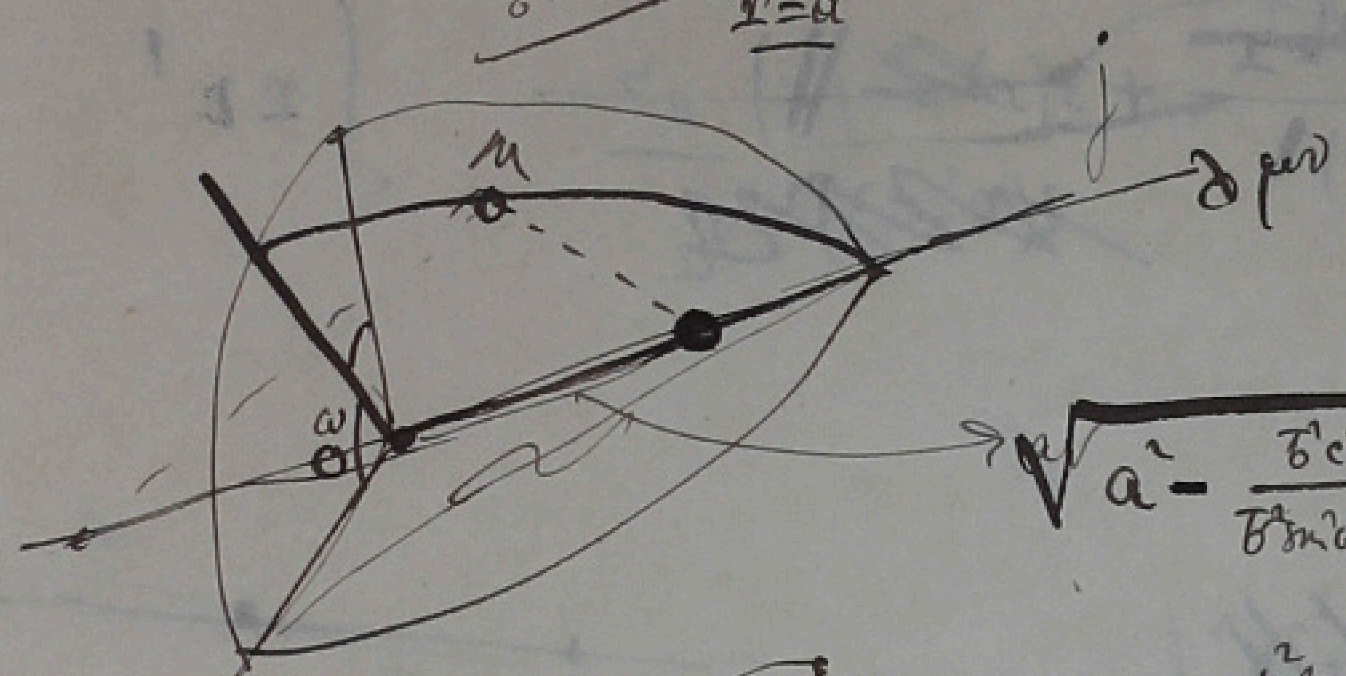
Chiar.mo Sig. Pr., [illegible], [illegible]

~~Mi affretto a Lei~~ Mi affretto a [illegible] della [illegible] del Dr. Cipolla, che servì per darmi La pregio di far[illegible] in sett. la relazione — Qui la Scuola non ha cagione alcuna, nè per forma ed apparenza di [illegible], nè per alt[illegible] di qualsiasi questione; ed è pel [illegible] [illegible] alle [illegible] di Fano — È [illegible] che Lei, ~~[illegible]~~ nella [illegible] [illegible], [illegible] che si [illegible] nelle [illegible] di Marzo di [illegible].



$0 < c < b < a$

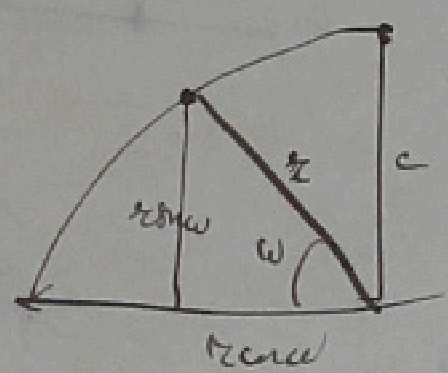
$\underline{r = a}$



$a+b$

$a-b$

$$\sqrt{a^2 - \frac{b^2c^2}{b^2\sin^2\omega + c^2\cos^2\omega}} = \sqrt{\frac{(a^2-c^2)b^2\sin^2\omega + (a^2-b^2)c^2\cos^2\omega}{b^2\sin^2\omega + c^2\cos^2\omega}} = ka$$

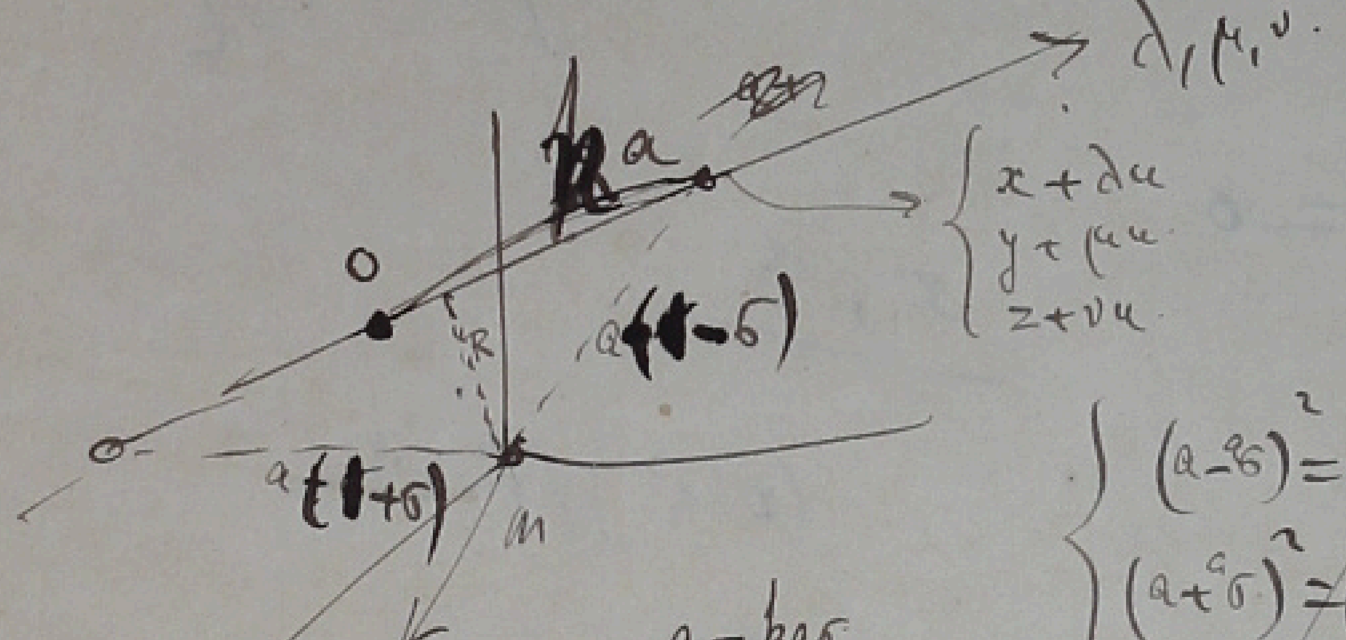


$$\frac{r^2\sin^2\omega}{c^2} + \frac{r^2\cos^2\omega}{b^2} = 1$$

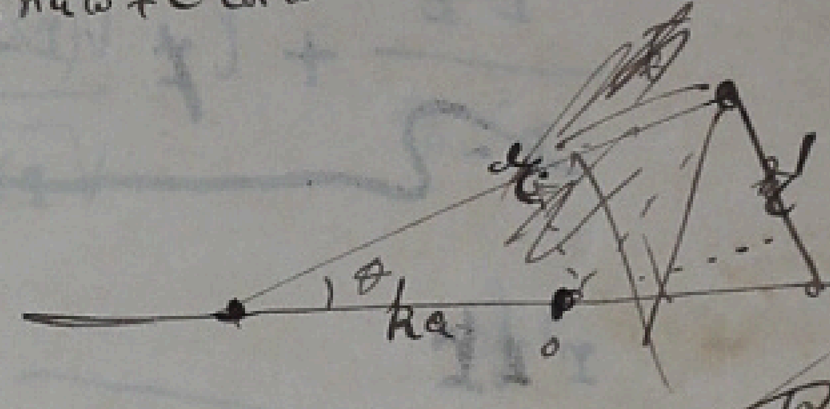
$a^2b^2 - b^2c^2$

a^2c^2

$$r^2 = \frac{b^2c^2}{b^2\sin^2\omega + c^2\cos^2\omega}$$



$$\begin{cases} x+\lambda u \\ y+\mu u \\ z+\nu u \end{cases}$$



$$\begin{cases} (a-a\sigma)^2 = (x+\lambda u)^2 + (y+\mu u)^2 + \cdots \\ (a+a\sigma)^2 = (x-\lambda u)^2 + \cdots \end{cases}$$

$a - ka\sigma$

σ, k eccentric.

$$a^2(1+\sigma^2) = x^2+y^2+z^2+a^2k^2$$

$$a\sigma = (\lambda x + \mu y + \nu z)k$$

$$x^2+y^2+z^2+k^2a^2 = a^2(1+\sigma^2)$$

$$-(\lambda x+\mu y+\nu z) = a\frac{\sigma}{k}$$

$r + r' = 2a$

$$r = \frac{p}{1-k\cos\theta} = b + ka\cos\theta$$

$r = b + ka\cos\theta$

$$b^2 = ab + ak\cos\theta\,(a-b) - k^2a^2\cos^2\theta$$

$$k^2a\cos^2\theta = (a-b)(b+ka\cos\theta)$$

$$(a+b)k\cos\theta = b + ka\cos\theta$$

$ka = 1$

$a\cos\theta - b\cos\theta = \nu$

$$x^2 = \frac{r^3 - a^3 - j^2 r}{r^3 - a^3} r^2$$

$$xx' = \frac{2(r^3-a^3)^2 + 3j^2 a^3 r}{2(r^3-a^3)^2} rr'$$

$$(r^3-a^3)(2r^3 - 2a^3 - 3j^2 r) + (\cancel{r^3 - a^3} + j^2 r)\,3r^3$$

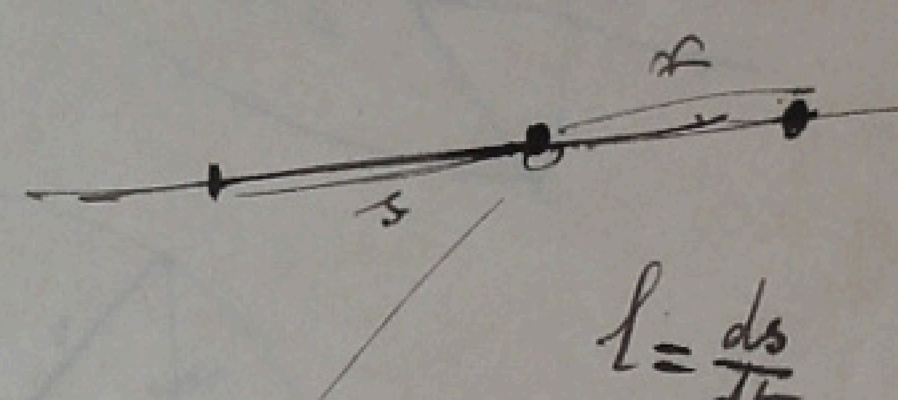
$$2(r^3-a^3)^2 - 3j^2 r(\cancel{r^3} - a^3) + \cancel{3j^2 r^4}$$

$$x' + \frac{3\varphi}{r^2}x = x' + \frac{3x}{2r^2}\cdot\frac{a^3 r r'}{r^3-a^3}$$

$$xx' + \frac{3x^2}{r^2}\varphi = \left[\frac{2(r^3-a^3)^2 + \cancel{\dots}}{2(r^3-a^3)^2} + \cancel{3(\dots)}\ \frac{a^3}{\cancel{\dots}}\right] rr'$$

$$\cancel{3\,\frac{r^3-a^3-j^2 r}{}}$$

$$\frac{r^3}{(r^3-a^3)} rr' + \cancel{\frac{\dots}{\dots}}\, lx = 0$$



$$l = \frac{ds}{dt}$$

$$\frac{r^3 r'}{\cancel{r^3-a^3}} + l\, \frac{\sqrt{(r^3-a^3-j^2 r)(r^3-a^3)}}{\cancel{\sqrt{r^3-a}}} = 0$$

$j=0$ $\quad j^2 = 0$

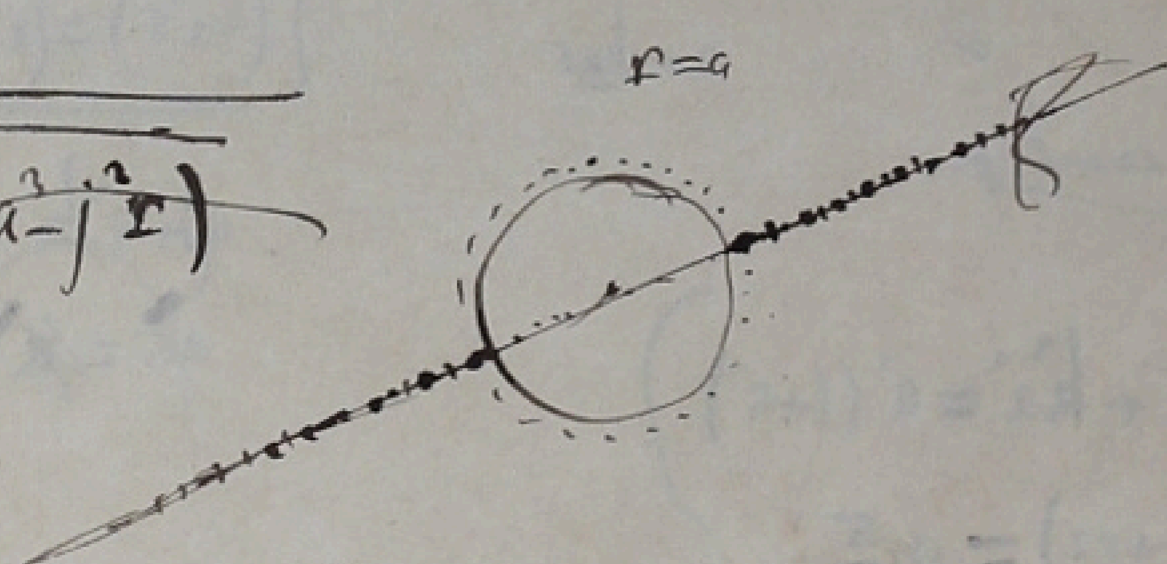
$$\frac{r^3\,dr}{\sqrt{(r^3-a^3)(r^3-a^3-j^2 r)}} + \frac{ds}{dt} = 0$$

$r,\ s$

$$(r^3-a^3)(y^2+z^2)=0$$

$$s = \int_r^{r_0} \frac{r^3\,dr}{\sqrt{(r^3-a^3)(r^3-a^3-j^2 r)}}$$

$r=a$



$j=0$ $\qquad \dfrac{r^3\,dr}{r^3-a^3}$

$$x' + \frac{a^3+2r^3}{2r^3}\,l + \frac{3x}{r^2}\,\frac{a^3 r r'}{2(r^3-a^3)} = 0$$