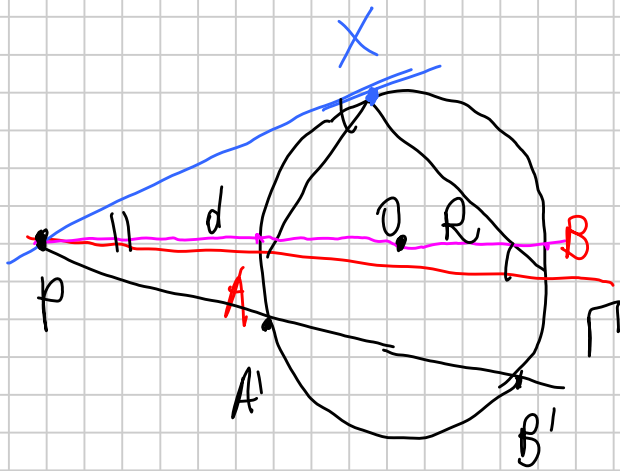


GEOMETRIA - "POTENZE" (Alessandra Caraceni)

Titolo nota

06/12/2009



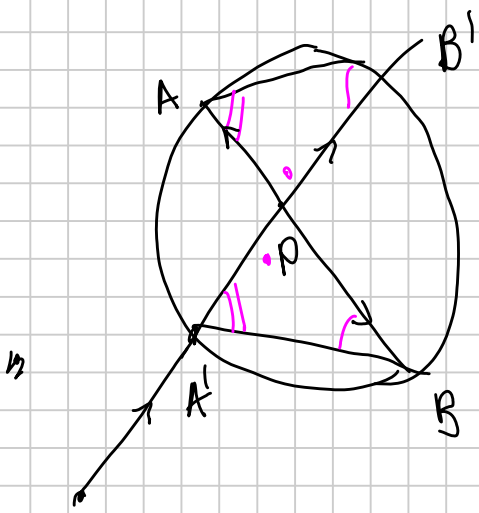
(tg - secante)

$$PX^2 = PA \cdot PB =$$

$$= (d+R)(d-R) =$$

$$= d^2 - R^2$$

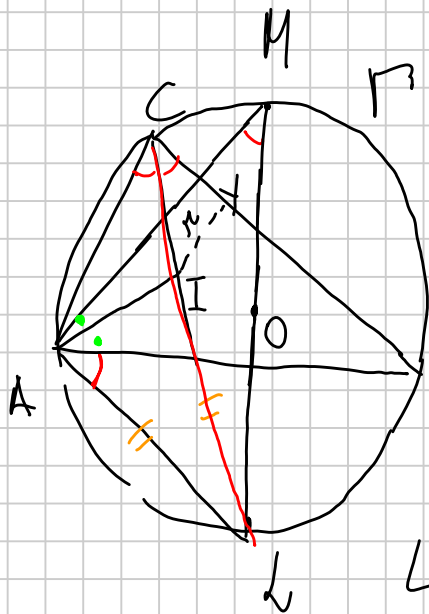
$$\boxed{\text{pow}_{\Gamma}(P)}$$



$$\text{pow}_\Gamma(P) = d^2 - R^2 < 0$$

$$|\text{pow}_\Gamma(P)| = AP \cdot PB$$

Problema



$$IO = d$$

$$d^2 = R^2 - 2Rr$$

$$|\text{pow}_{\Gamma}(I)| = R^2 - d^2 =$$

$$= CI \cdot IL =$$

$$\approx CI \cdot AL$$

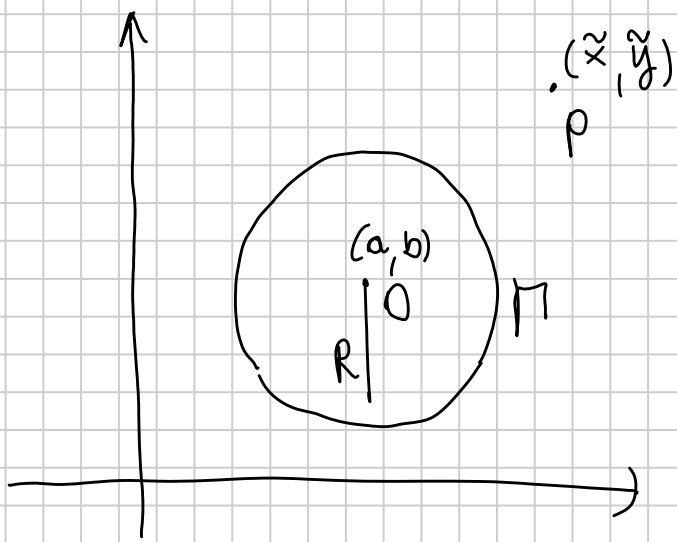
$$= 2Rr$$

$$\angle A M = \frac{\pi}{2}$$

$$\angle A I L = \angle A I C = \angle A I M$$

$\triangle A I L$ isosceles

$$ALM \sim CIY$$



CIRCONFERENZA

$$(x-a)^2 + (y-b)^2 = R^2$$

$$\text{pow}_{\pi}(P) =$$

$$= d^2 - R^2 =$$

$$= (\tilde{x}-a)^2 + (\tilde{y}-b)^2 - R^2$$

$P(x, y)$

$$(x-a)^2 + (y-b)^2 - R_1^2 = (x-c)^2 + (y-d)^2 - R_2^2$$

