

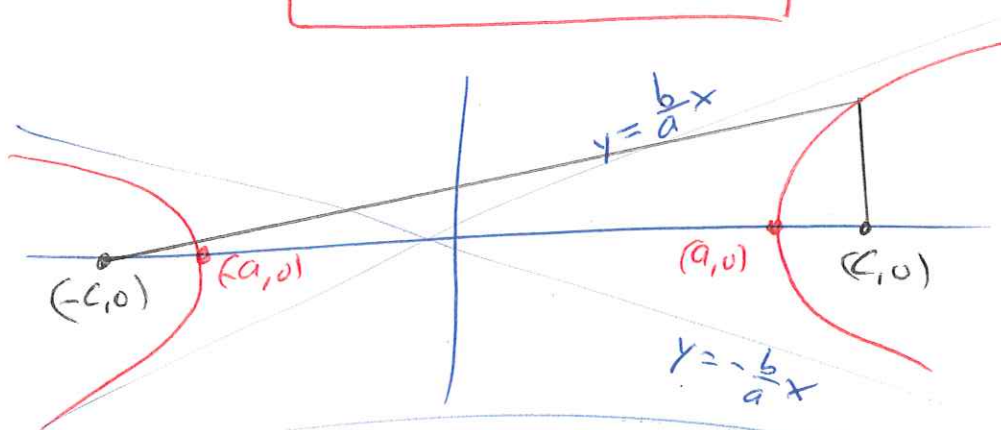
Transcendental Hyperbolas

Problem: Find all points P such that the difference between the distances to 2 given points A & B is constant

Digression: Euclidean hyperbolas

Ex:

$$\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$$



Foci at $(\pm c, 0)$; $c^2 = a^2 + b^2$
distance difference = $\pm 2a$

Draw hyperbolas with same foci
& various distance differences