



Chess Club A0669



$$A(\cos \alpha; \sin \alpha)$$

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

$$AB^2 = (\cos \alpha - \cos \beta)^2 + (\sin \alpha - \sin \beta)^2$$

$$\cos(\alpha + \beta) = \cos \alpha \cos \beta - \sin \alpha \sin \beta$$



$$d = \frac{h}{\sin \alpha}$$

$$Ad - Bd = Bh - Ch$$

$$\sin \alpha = \frac{h}{d} \Rightarrow \sin \alpha = \frac{Ch}{Ad} \Rightarrow \sin \alpha = \frac{Ch}{\frac{Ch}{\sin \alpha}} \Rightarrow \sin^2 \alpha = 1$$



$$\sin^2 \alpha + \cos^2 \alpha = 1$$

$$\cos \alpha = \frac{d}{h} \Rightarrow \cos \alpha = \frac{d}{\frac{h}{\sin \alpha}} \Rightarrow \cos \alpha = \frac{d \sin \alpha}{h} \Rightarrow \cos \alpha = \frac{Ch}{Ad} \Rightarrow \cos \alpha = \frac{Ch}{\frac{Ch}{\sin \alpha}} \Rightarrow \cos^2 \alpha = 1$$



Globe and White Board J7584



Laptop A-0345



Plugged In Brain K7703



Science Microscope K7874