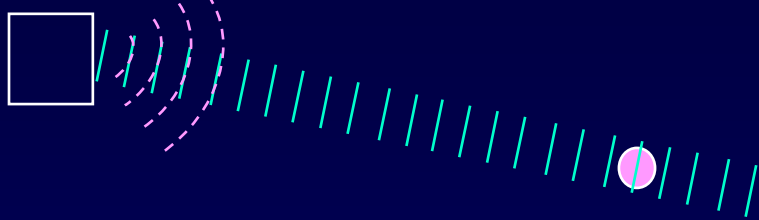


Example: Changing phase of the Source

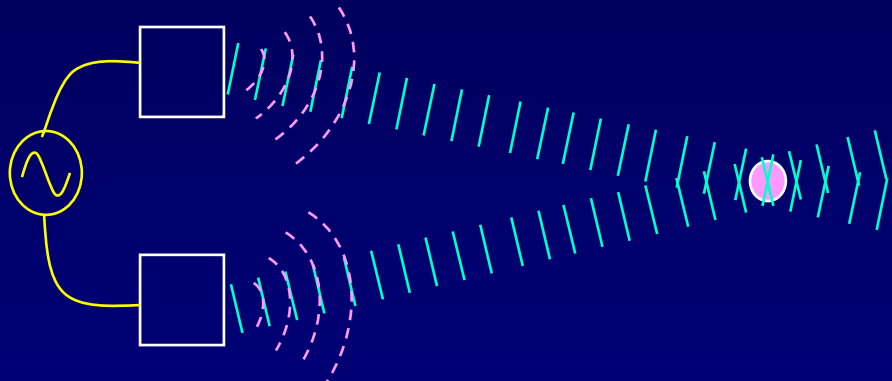
Each speaker alone produces an intensity of $I_1 = 1 \text{ W/m}^2$ at the listener:



$$I = I_1 = A_1^2 = 1 \text{ W/m}^2$$

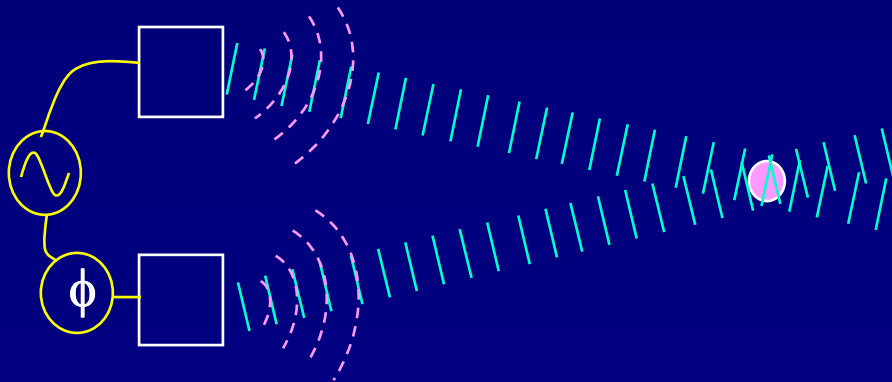


Drive the speakers in phase. What is the intensity I at the listener?



$$I =$$

Now shift phase of one speaker by 90° . What is the intensity I at the listener?



$$I =$$