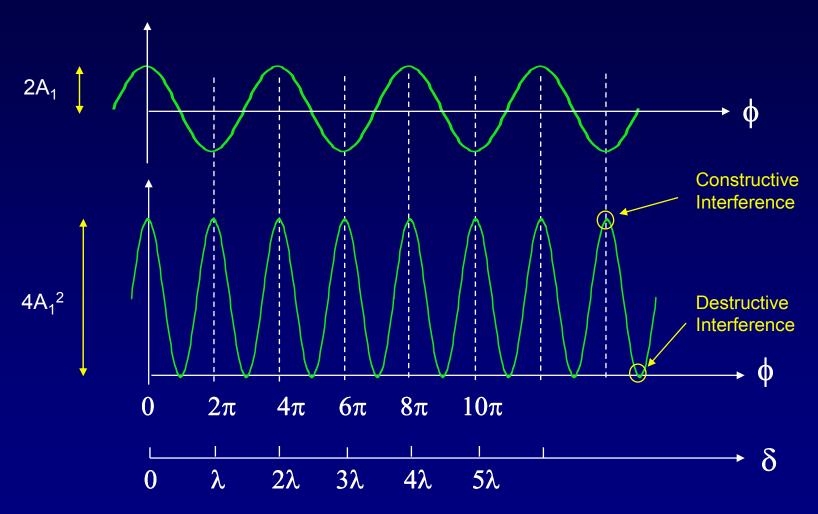
## Amplitude vs. Intensity for 2 Interfering Waves

Plot  $2A_1\cos(\phi/2)$  and  $4A_1^2\cos^2(\phi/2)$  as a function of  $\phi$ .



Q: What is the spatial average intensity?

A:  $I_{av} = 4I_1*0.5 = 2I_1$  Does this make sense?