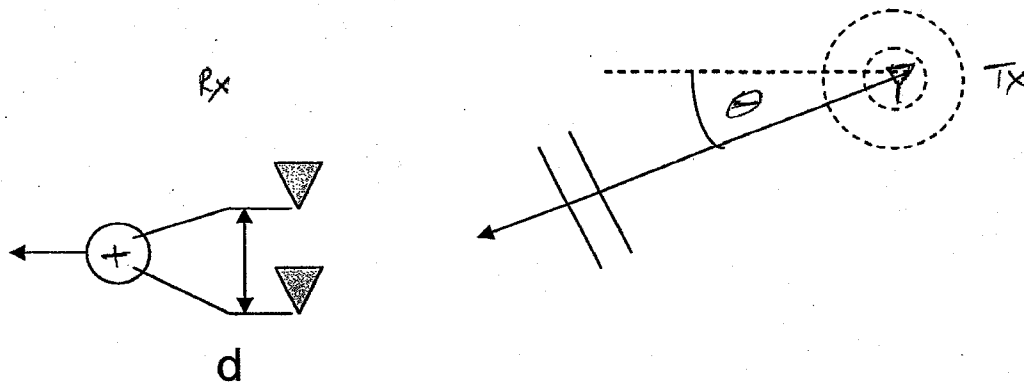


Quals Question – 2007
Prof. A. Paulraj

Consider a receiving antenna array with 2 omni directional elements and a beamformer that combines the antenna outputs (equi-phase: ie no phase shifts). Let a planar CW wave front impinge on the antenna array at angle θ



Questions:

1. If $d = \lambda/2$, what is the beamformer response as a function of the angle of arrival
2. If $d = 5\lambda$, what will be the new beamformer response