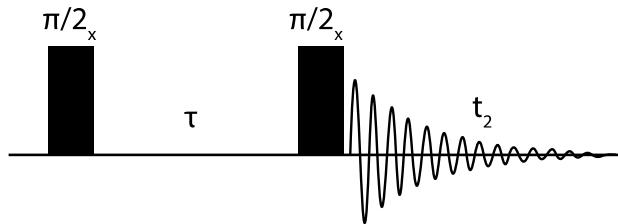


Jigsaw 3A

1. * [Keeler Sections 4.7-10] A pulse sequence is shown below.



- a. Use vector diagrams to predict the outcome of the sequence when applied to equilibrium magnetization. In your answer, set up a table describing the values of x-, y- and z- magnetizations after each element of the pulse sequence.
- b. For a fixed delay, sketch a graph of the x- and y-magnetization as a function of the offset during t_2 .
- c. At what values of $\Omega\tau$ do any nulls occur?

2. [Keeler Section 4.9] What happens to net magnetization after a 90° pulse? How can we measure T_2 ? Draw the pulse sequence and the resulting vector model for two spins. *See also: Jigsaw 3D.2*