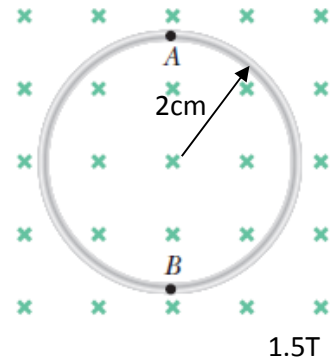


Name: _____

PHY 232 Summer 2016 Class Work
Class 32 . More Faraday's Law

Consider a 100 turns circular loop (2cm in radius) placed in a uniform field of 1.5T as shown in the diagram, at $t=0$. Calculate the induced emf (magnitude only) in the following cases:



(a) The field is increased from 1.5T to 3T in 0.5s.

(b) The loop is grasped at points A and B and stretched until its area is nearly zero in 0.1s.

(c) What is the emf as a function of t if the loop is rotating with bearing at A and B with an angular speed of 10 radian per second?