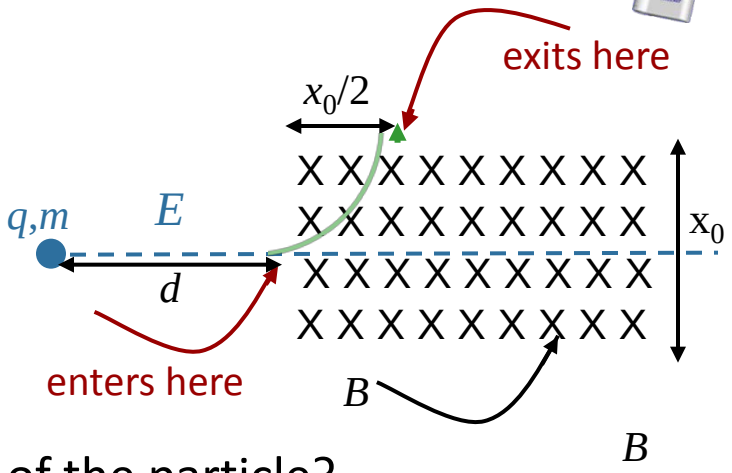
Calculation

A particle of charge q and mass m is accelerated from rest by an electric field E through a distance d and enters and exits a region containing a constant magnetic field B at the points shown. Assume q,m,E,d, and x_0 are known.

What is B? $v_o = \sqrt{\frac{2qEd}{m}}$



What can we use to calculate the radius of the path of the particle?

$R = x_o$	$R = 2x_o$	$R = \frac{1}{2}x_o$	$R = \frac{mv_o}{qB}$	$R = \frac{v_o^2}{a}$
A	B	C	D	E

Why?