Reading 2

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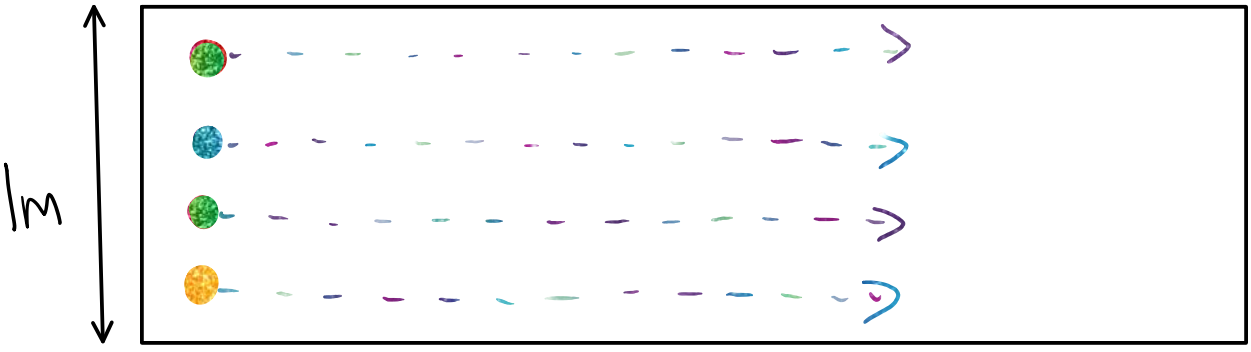
1)a) steady flow



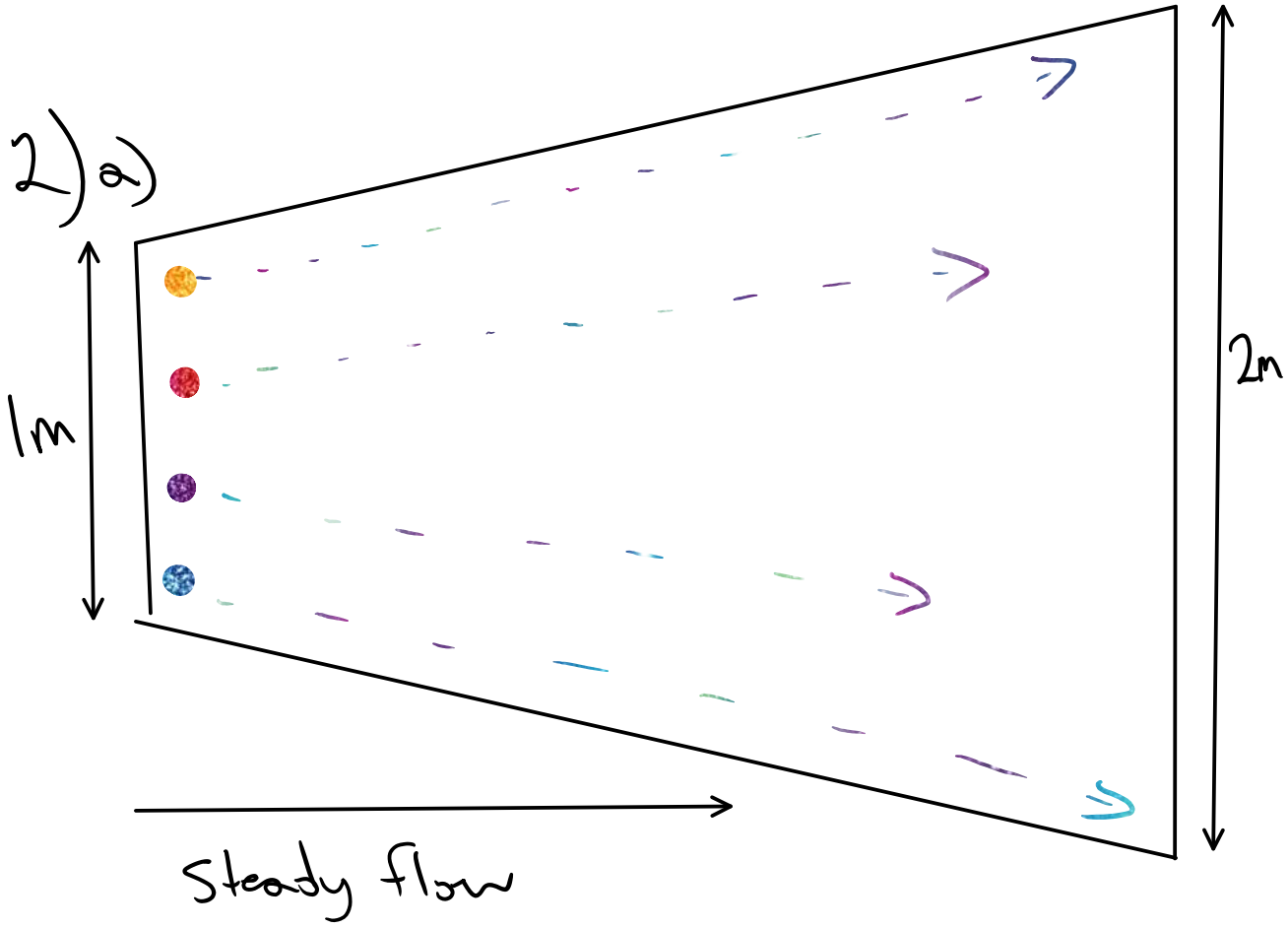
The dye would move along the dotted lines from the initial injection points in steady flow

b) if there is no friction inertia keeps the water moving no added energy should be required

c) gravity if the stream is on an incline

or perhaps a high pressure area has been created by a waterfall or something upstream which is exerting a net force downstream.

2) a)



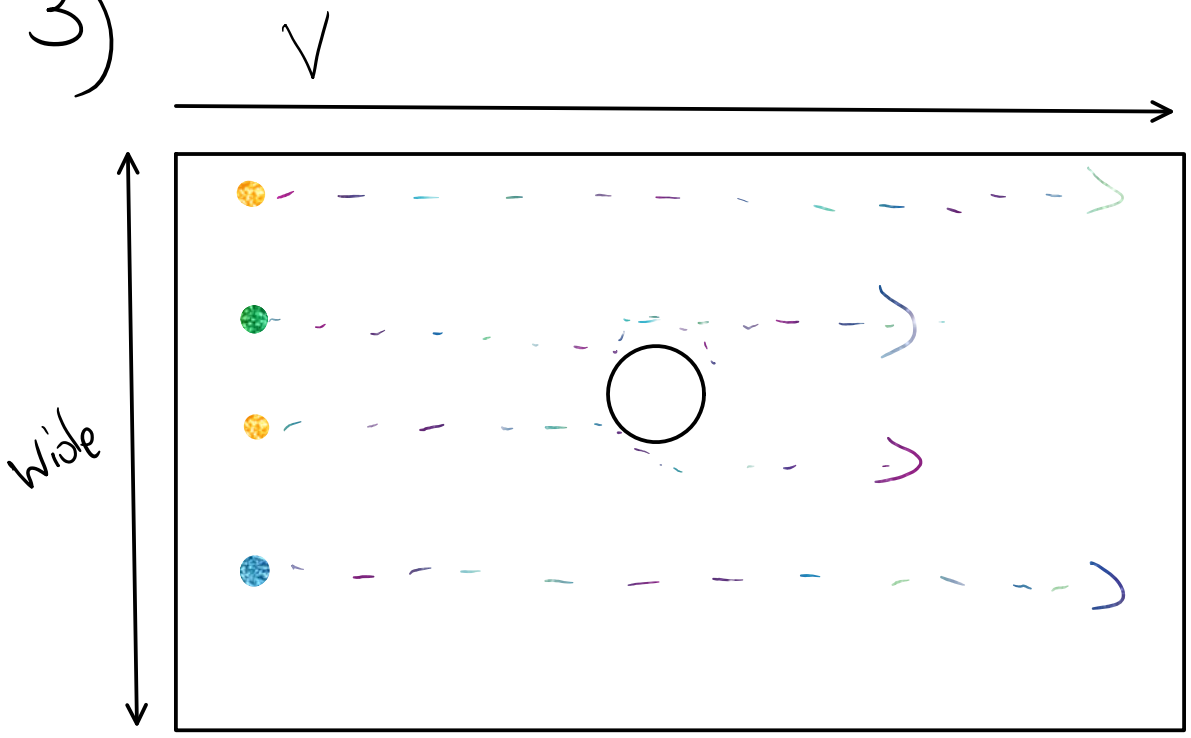
b) momentum should remain conserved in this motion assuming the widening happens outward from the center and the drops are evenly spaced.

the mass = constant, downstream speed = const

and the lateral momentum of the 3rd and 4th drop is oppsite that of the 1st and 2nd

c) I don't know...

3)



b) the deformation is caused by normal forces from the cylinder and friction

c)