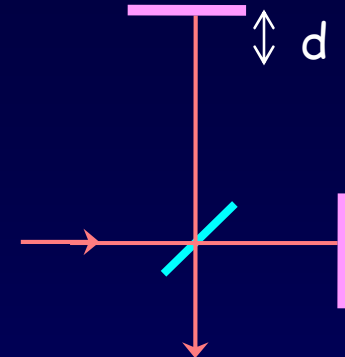


# ACT 4

Consider the following Michelson interferometer. Suppose that for the setup shown, all the light (with  $\lambda = 500 \text{ nm}$ ) comes out the bottom port.



1. How much does the top mirror need to be moved so that none of the light comes out the bottom port?

- a. 125 nm      b. 250 nm      c. 500 nm

2. Where does the light then go?

- a. down      b. up      c. left      d. right

