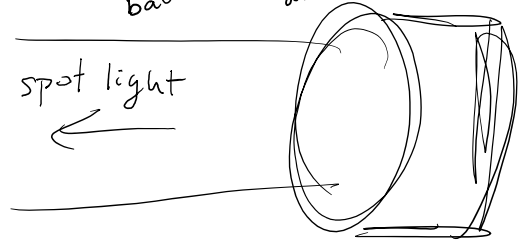


The black balls are behaving similar to  $\text{CO}_2$  molecules. Each ball has a cross-sectional area.



Some of the screen is in shadow, some in light.

Q6 asks you to calculate the value of  $L$  such that half the screen is in shadow.