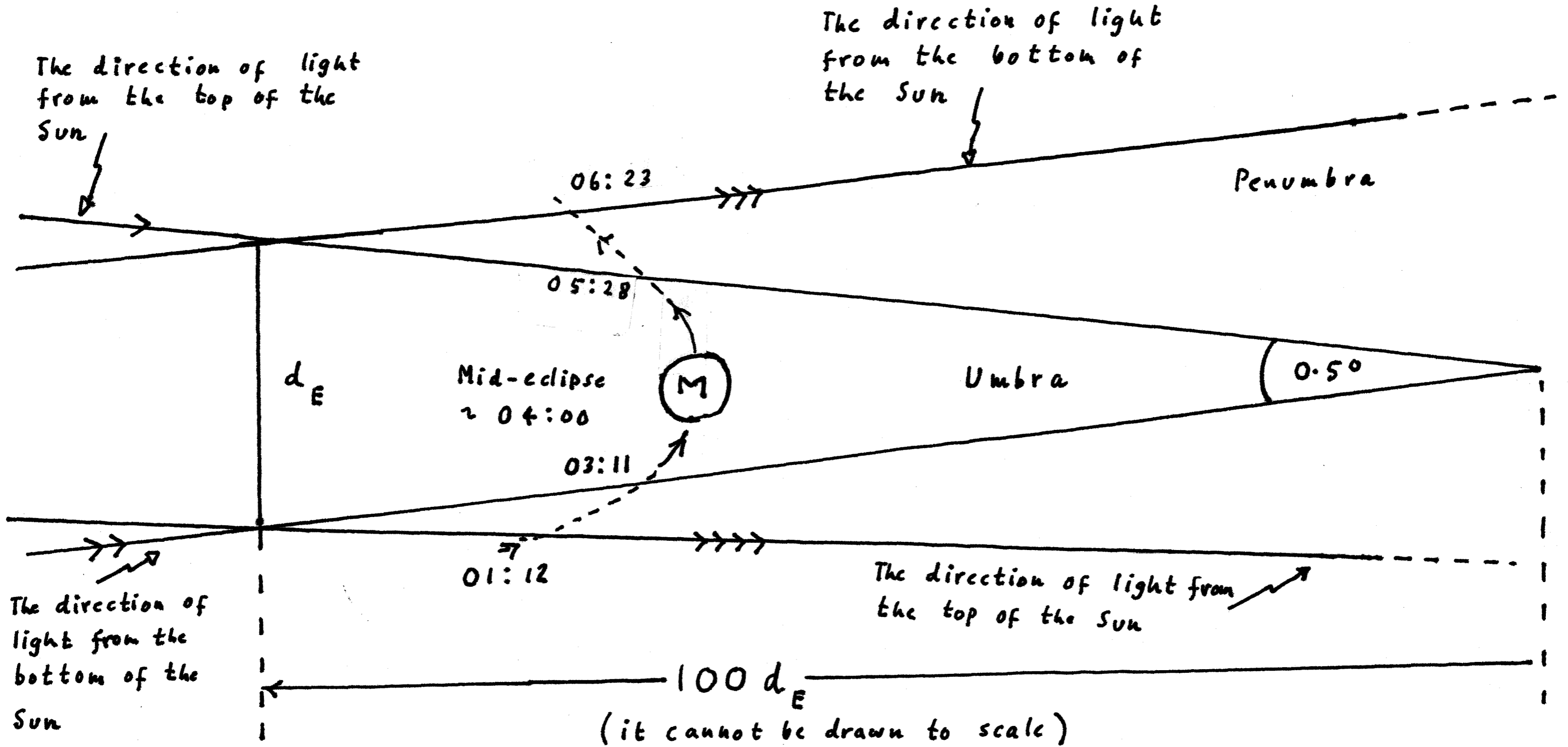


# The total Lunar Eclipse : 2015, September 28



## Notes:

- (i) The Sun, an extended source of light, is larger than the object (the Earth).  
 $\therefore$  the three-dimensional umbral region is finite in length.
- (ii) The three-dimensional penumbral region is infinite in length, as is shown in the diagram.
- (iii) The umbral region, at the Lunar distance, is quite wide, so it takes the Moon just over two hours to traverse this inner shadow.

$\Delta \sim 6000$  miles DF 2016, September 6