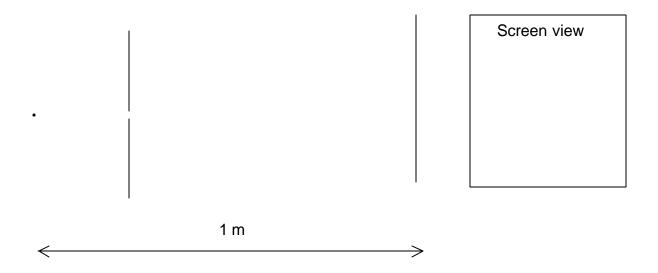
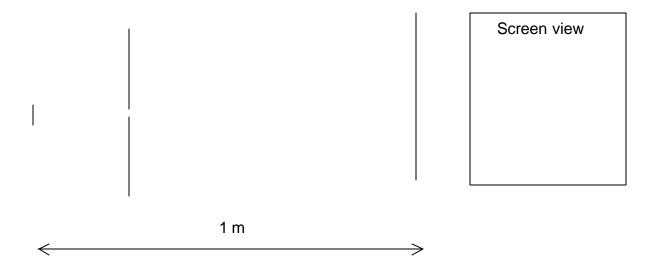
Suppose we have a circular aperture in a baffle and two light sources, a point source and a line source.

1. Point source. Determine how many rays do we need to use to determine the extent of the illumination on the screen for the point source. Draw the pattern of illumination you would expect to see on the screen to SCALE.



Explain your diagrams and reasoning fully.

2. Extended source. Determine how many rays do we need to use to determine the extent of the illumination on the screen for the line source. Draw the pattern of illumination you would expect to see on the screen to SCALE.



Explain your diagrams and reasoning fully.