Calculation

A magnifying glass is used to read the fine print on a document. The focal length of the lens is 10mm.

At what distance from the lens must the document be placed in order to obtain an image magnified by a factor of 5 that is not inverted?



Conceptual Analysis

Lens Equation: $1/s + 1/s^2 = 1/f$ Magnification: $M = -s^2/s$

Strategic Analysis

Consider nature of image (real or virtual?) to determine relation between object position and focal point

Use magnification to determine object position