

Memorandum

To: Lead Engineers
From: Senior Optical Scientist
Subject: Lens characteristics

Lens
Sculptors

You all know that the distance from an object to a lens (D_o) is related to the distance from the lens to the image (D_i) by this equation:

$$1/D_o + 1/D_i = 1/f$$

where "f" is the focal length of the lens.

For the three new lenses we are about to release, the marketing department wants to have graphs that show how the image distance (D_i) depends on the object distance (D_o).

The focal lengths of these three new lenses are 25 mm, 35 mm, and 50 mm.

One other point: for the 50 mm. lens, we need to know what the object distance would be for image distances of 58, 60, and 62 mm.

Have this on my desk by tomorrow morning, please.

A. Leeuwenhoek