

Optics 2

1. Vertical line object with the height 5 mm is located 50 cm in the front of a camera lens. Find the distance of the image from the lens, when the focal length of the lens is 8 cm.
2. What will be the distance of the virtual object in the case of a thin lens from the previous case – when the vertical object itself is located only 5 cm in the front of the lens?
3. An object is placed 4 cm in the front of a magnifying lens. The image is magnified 5 times. Calculate the optical power of the lens.

HW: The focal length of a camera lens is 15 cm. A vertical object with a height of 10 mm is placed 40 cm in front of the lens. Determine the distance at which the image is formed.