

NAME, GROUP:

DATE:

working with:

## OPTICS 1

### 1. Determination of the focal length of a convex lens

The color of the tape on the lens:

The distance between the object and the screen: ..... ( )

	$d_{obj}$ ( )	$d_{img}$ ( )	$s_{img}$ ( )	$f$ ( )	$M$	$S_{obj}$ ( )
error						

### 2. Estimation of the thickness of a hair fiber using a lens

$d_{obj}$ ( )	$d_{img}$ ( )	$s_{img}$ ( )	$M$	$S_{obj}$ ( )	error $\Delta S_{obj}$ ( )

### 3. Determination of the refractive index of the prism

$\phi = 60^\circ$

critical angle			$n$
red:		$\alpha_{c,r} =$	
violet:		$\alpha_{c,v} =$	
error		$\pm 1^\circ$	

### 4. Determining the refractive index of an unknown material by measuring Brewster's angle

The measured Brewster's angle:

The refractive index of the unknown material:

This material is .....