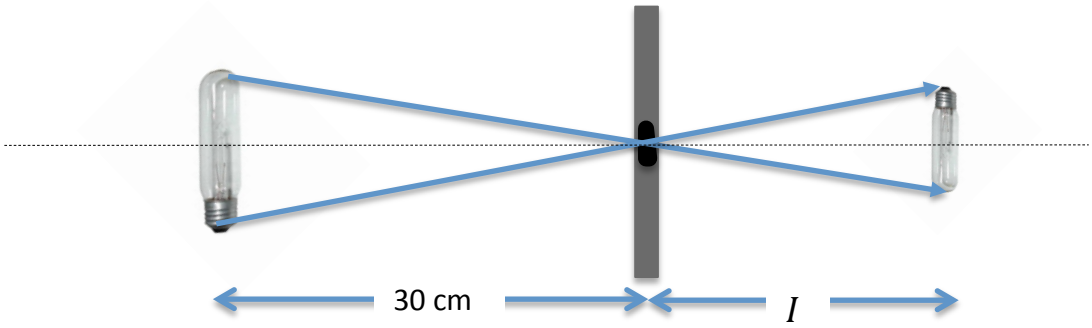
Name(s)_____

PINHOLES AND TRIANGLES - PART 2, IMAGE SIZE
How big is the image?



$$\frac{H_I}{I} = \frac{H_O}{O}$$

1. Measure the length of the filament in the bulb as carefully as you can. Record the filament length below.
2. Set up a small triangle or circle hole mask 30 cm from the light bulb filament.
3. How big will the image be if the screen is 20 cm on the other side of the mask? (Show your calculations on the back.)
4. After you finish your calculation, put the screen at 20 cm and measure the image. Fill in the table below with your calculated and measured value.
5. Repeat for more distances as instructed.

Length of filament (in cm)_____

	Calculated image size	Measured Image Size
I = 20 cm		
I = 40 cm		
I = 60 cm		