Name _____
Physics Period ___

CONCAVE/CONVEX LENSES

I. Draw a ray diagram for each lens. Ray diagrams should be drawn to scale. Use a ruler.
- draw a ray **parallel** to the center line to the lens THEN through **F**
-draw a ray through **F** to the lens THEN **parallel** to the center line
- draw a ray through **center** of lens

II. Lens equation: Measure the object distance (d_o) and focal length (f). Using the lens equation, solve for the image distance (d_i). Using the magnification equation, solve for the magnification of the image. Next, *measure* the image distance and image height.
Do your mathematical answers match the ray diagram?

CONVEX (CONVERGING) LENS

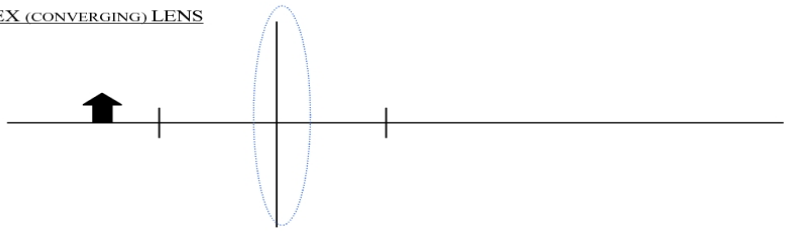

Image distance	Magnification	Based on Magnification Image should be:	Ray Diagram Image is:
		VIRTUAL / REAL	
		UPRIGHT / INVERTED	
		SMALLER / BIGGER	

CONCAVE (DIVERGING) LENS

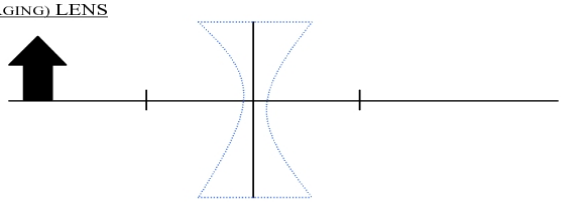

Image distance	Magnification	Based on Magnification Image should be:	Ray Diagram Image is:
		VIRTUAL / REAL	
		UPRIGHT / INVERTED	
		SMALLER / BIGGER	