

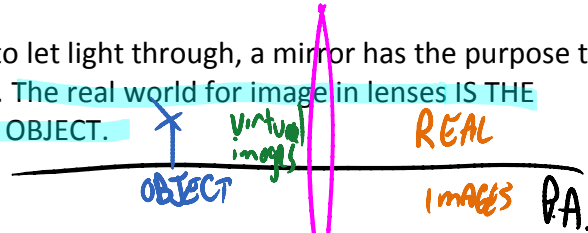
Lenses

Wednesday, May 19, 2010
11:06 AM

Lenses work oppositely to mirrors. **Convex Lens produces the same images as a concave mirror.**

Concave lens produces the same images as the convex mirror.

The purpose of lens is to let light through, a mirror has the purpose to bounce light backward. **The real world for image in lenses IS THE OPPOSITE SIDE OF THE OBJECT.**

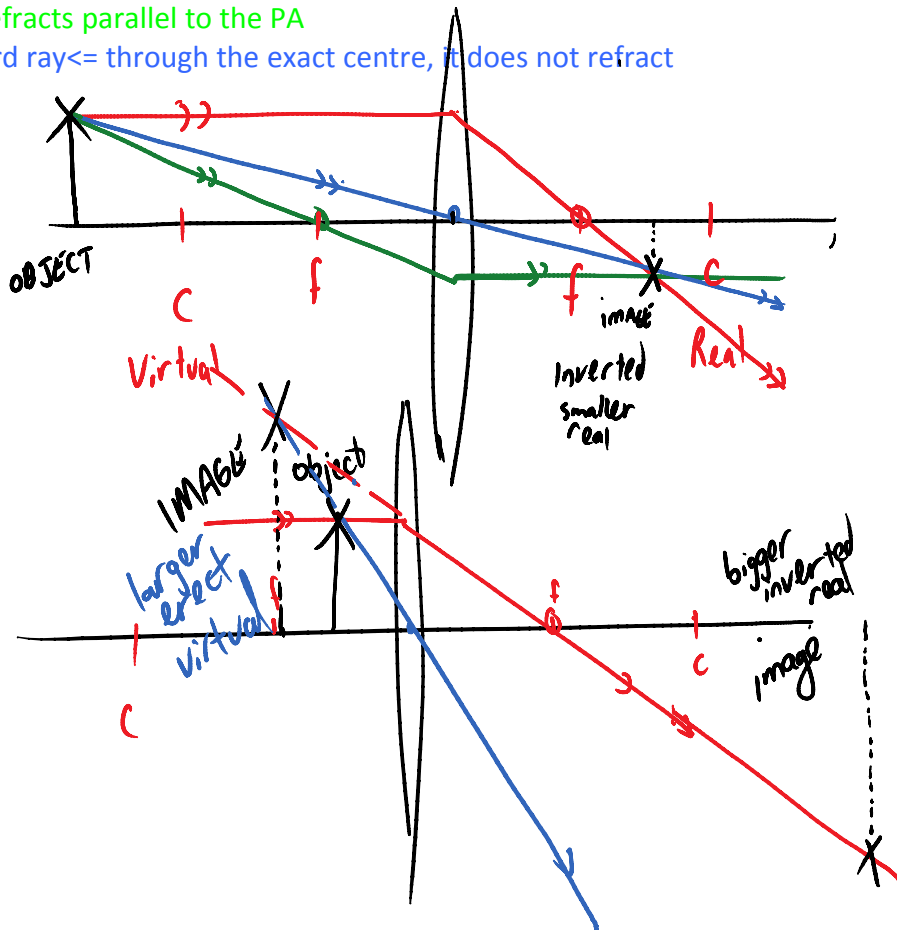


Ray diagram rules change a bit.

1st ray \Leftarrow parallel to principal axis, refracts through f (real f for convex lenses, virtual f for concave lens)

2nd ray \Leftarrow toward f (virtual for convex lens, real for concave lens) refracts parallel to the PA

3rd ray \Leftarrow through the exact centre, it does not refract



charts
1, 4, 5, 8, 9, 10, 12, 13, 14 try 18

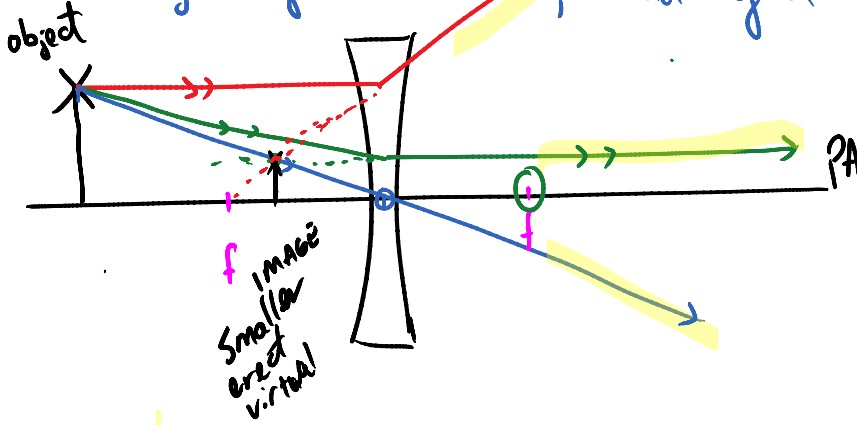
<http://www.phy.ntnu.edu.tw/ntnujava/index.php?topic=48.msg297#msg297>

CONCAVE LENS

① 1st ray \parallel to P.A. refract thru virtual f

② 2nd ray towards the real f, refract \parallel to P.A.

③ 3rd ray through the exact centre, does not refract



finish the sheets

1st - 2