



How to locate the image in a diverging (convex) mirror

SNC 2D1

April 18 2011

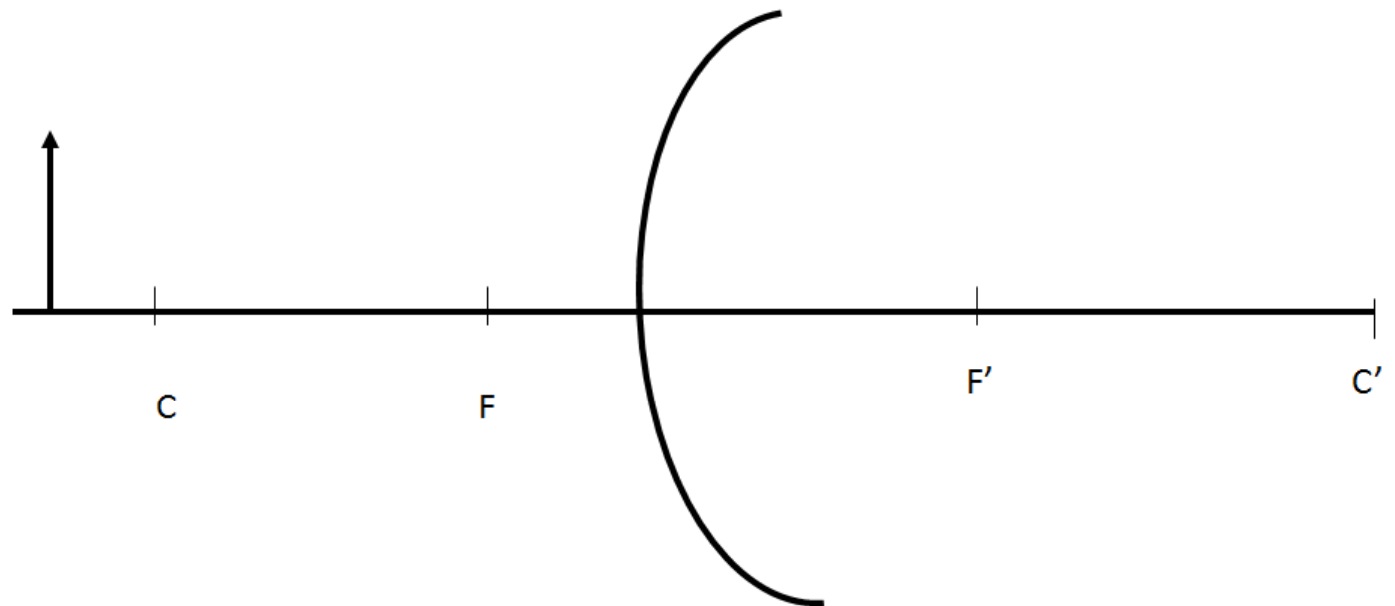
Mr. Dvorsky



- Recall if the mirror bulges out towards you like the back of a spoon, it is convex or divergent.



- In convex mirrors we still have points F and C.
- However, F is now called virtual F, and along with point C they are now located behind the mirror

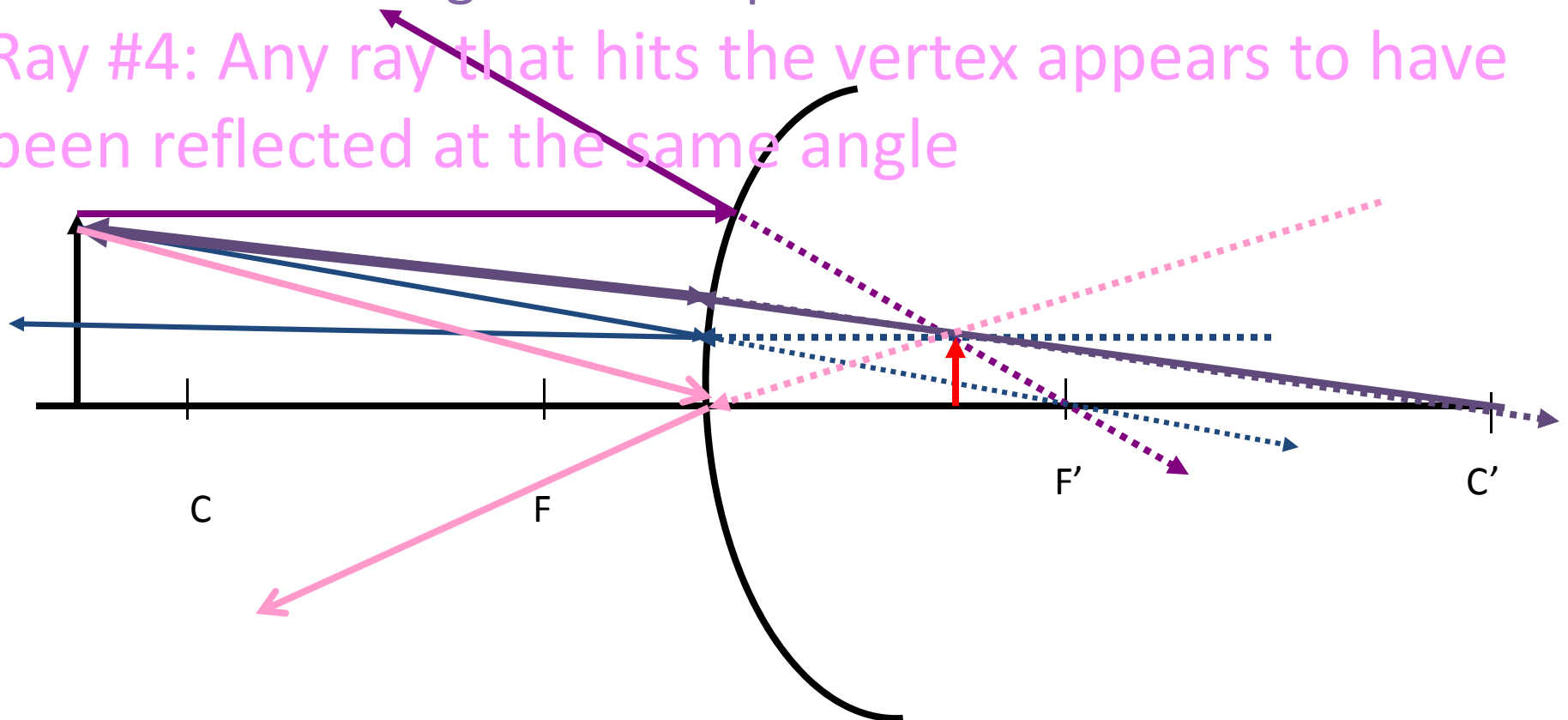


Ray #1: Any ray that is parallel to the PA is reflected as if it has passed through virtual F

Ray #2: Any ray that appears to have passed through virtual F is reflected parallel to PA

Ray #3: Any ray that appears to have passed through C is reflected along the same path

Ray #4: Any ray that hits the vertex appears to have been reflected at the same angle



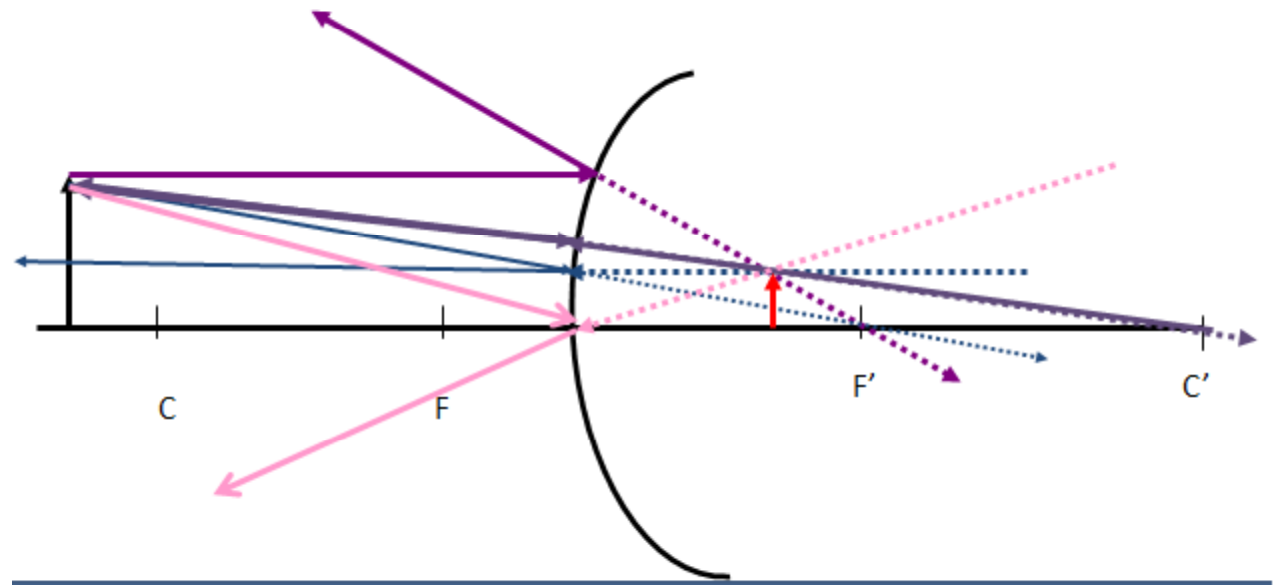
The light rays reflected off a convex mirror always diverge. Therefore these mirrors are also called diverging mirrors.

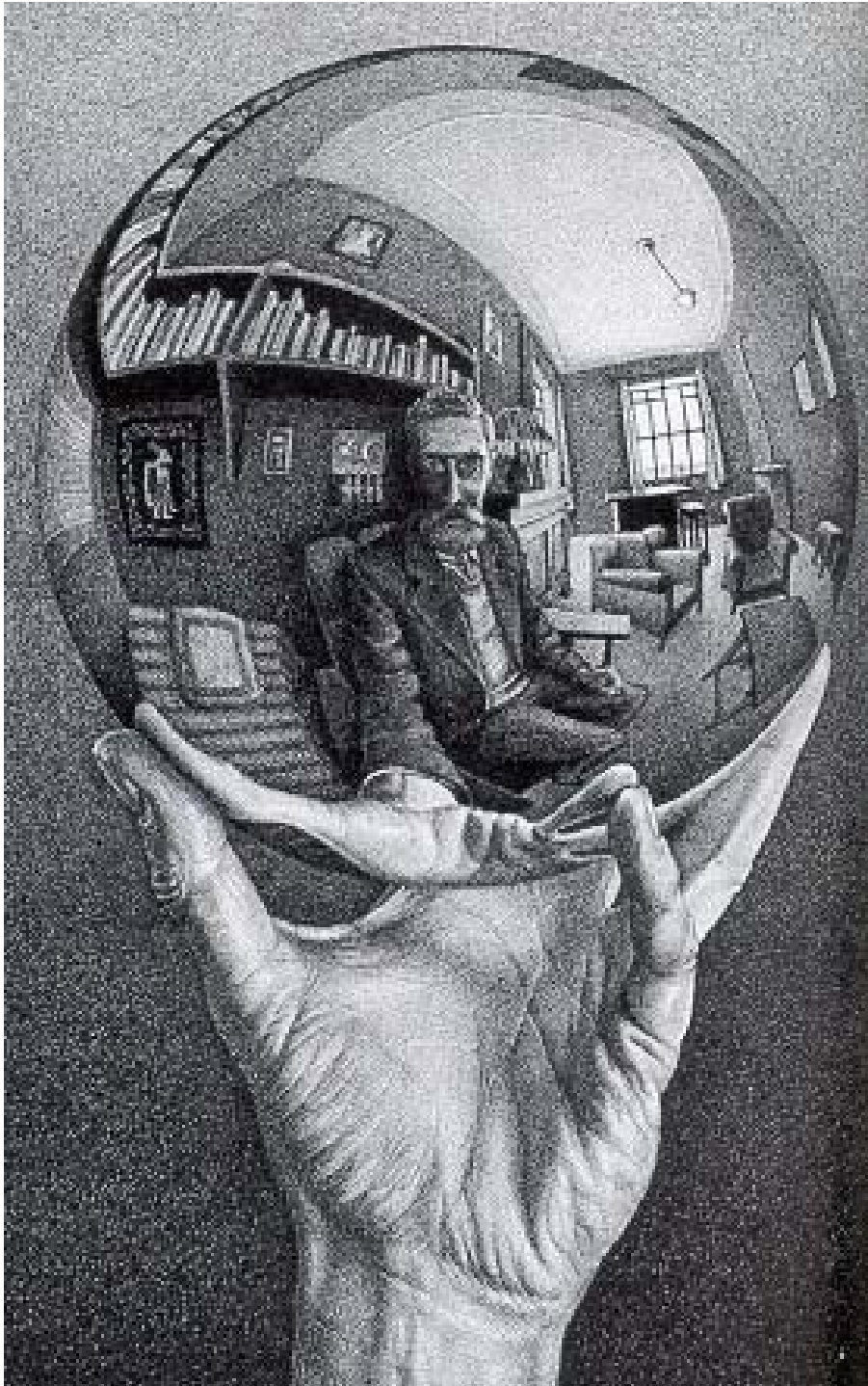


The reflected rays never cross in front of the mirror to form a real image.



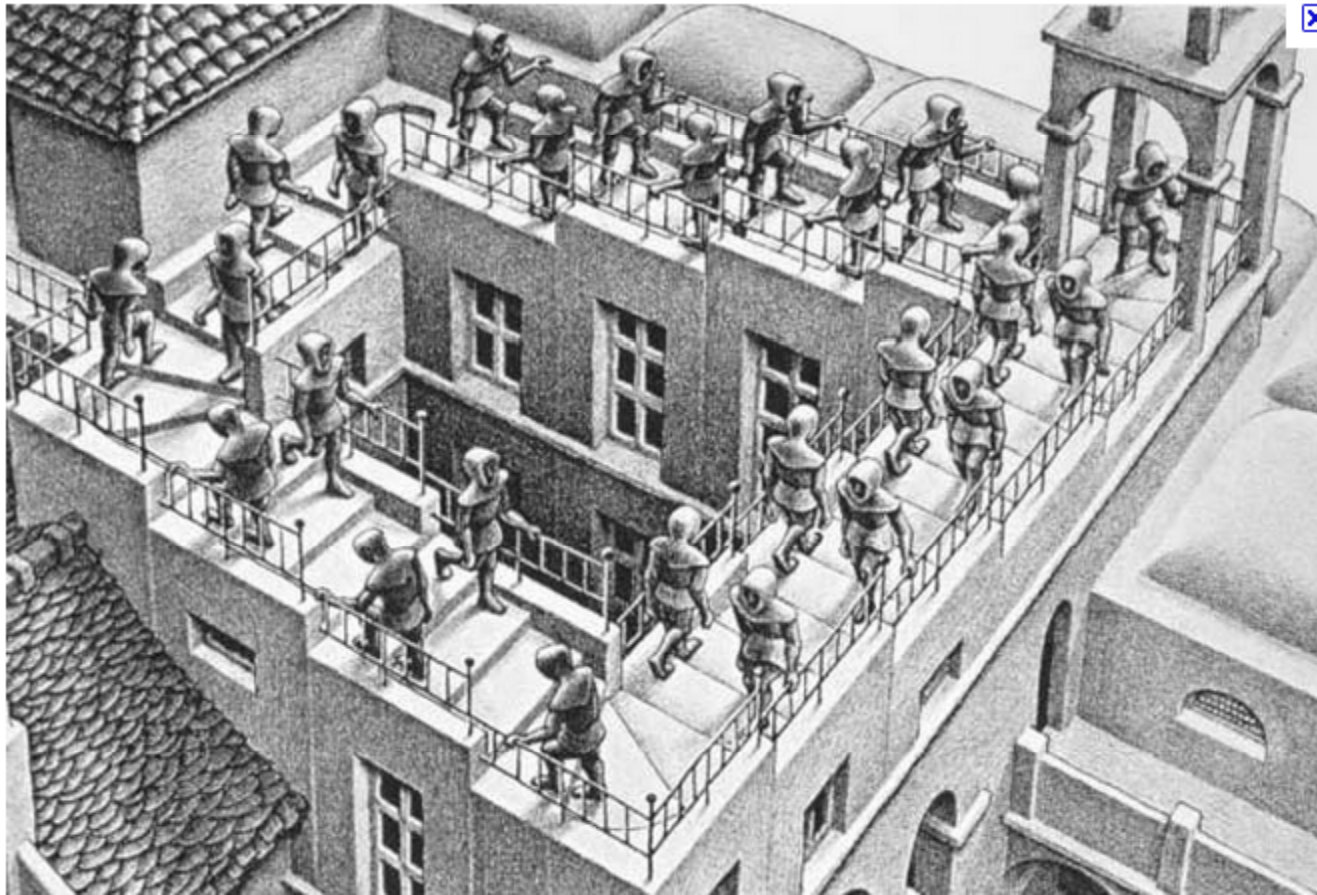
- The brain extrapolates these rays behind the mirror to where they appear to converge. This results in an image that is smaller, upright, and virtual.





CHAPTER REVIEW

- Page 506-507
- Please begin to prepare for your chapter 11 test



-Convex mirrors are often used as security mirrors in stores.



-also with their smaller upright virtual image they show a wider range that makes them useful as side-view mirrors in cars.

