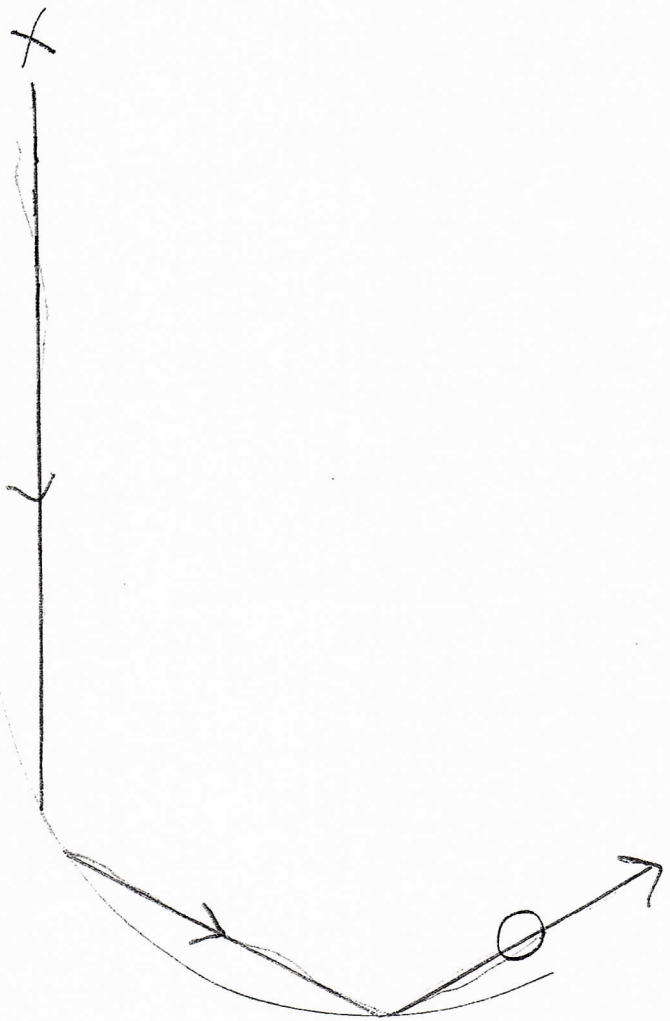


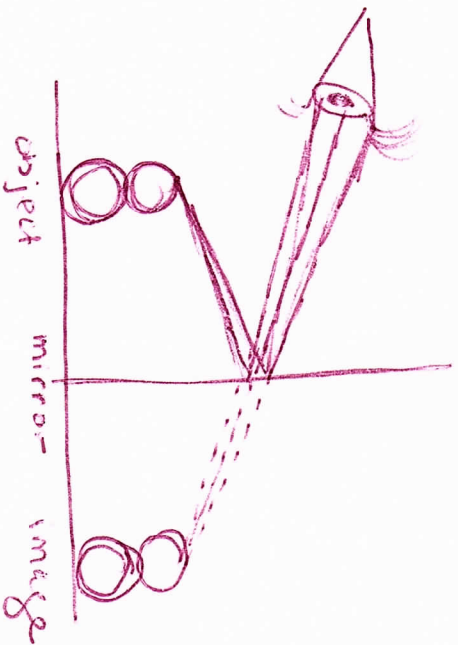
Challenge # 3 - Mirror (curved, one beam, 2 reflections)

CONCAVE

- surface curves inward
- ex, inner surface of shiny, metal spoon



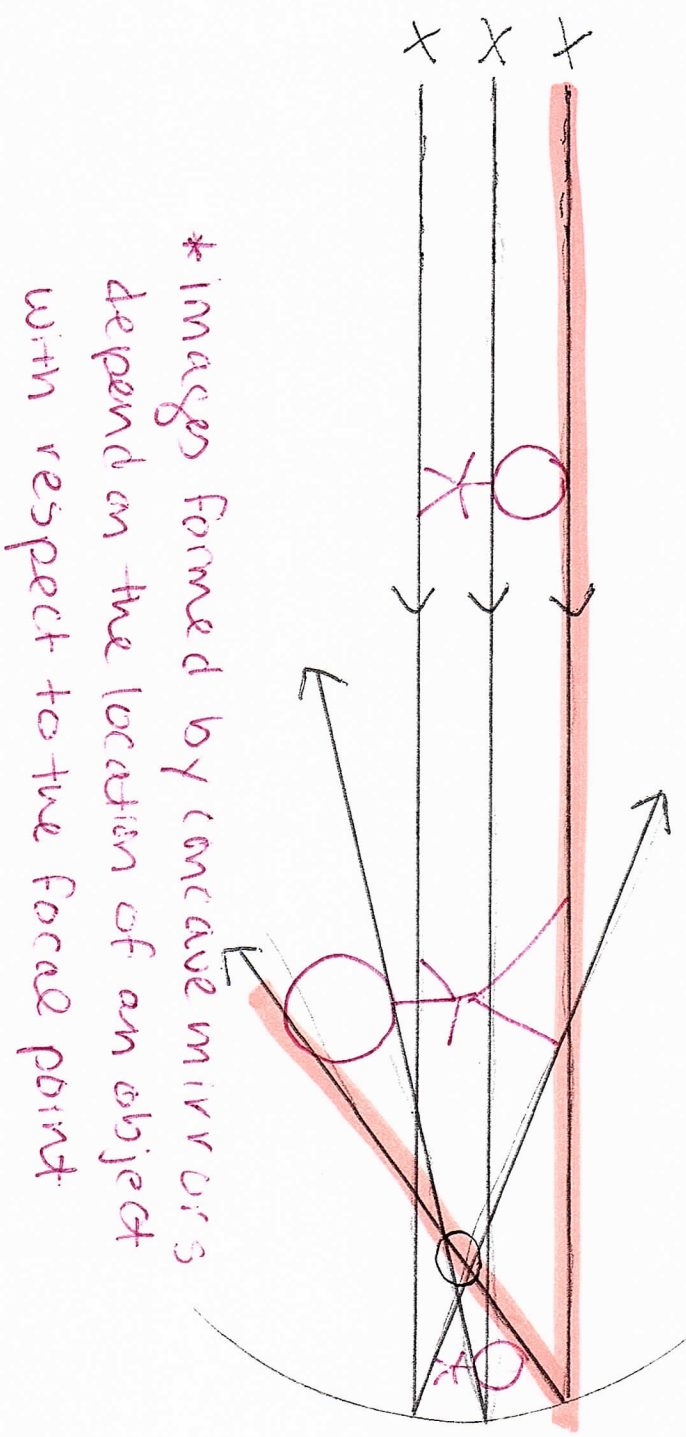
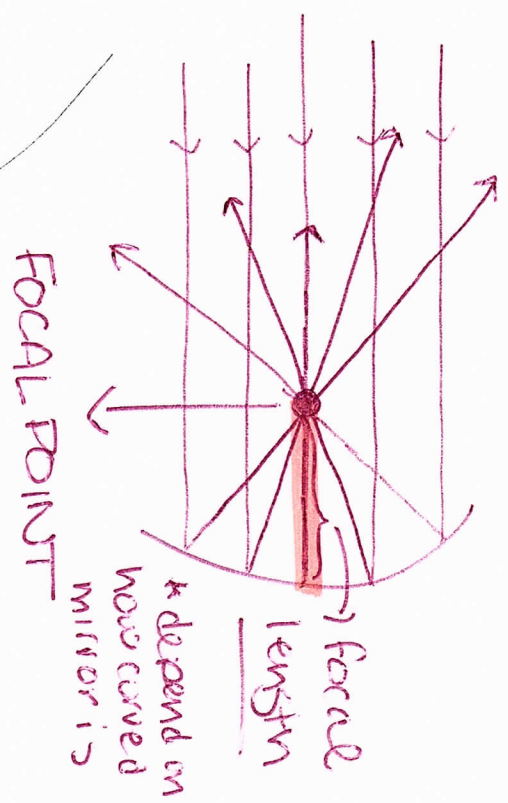
PLANE MIRRORS



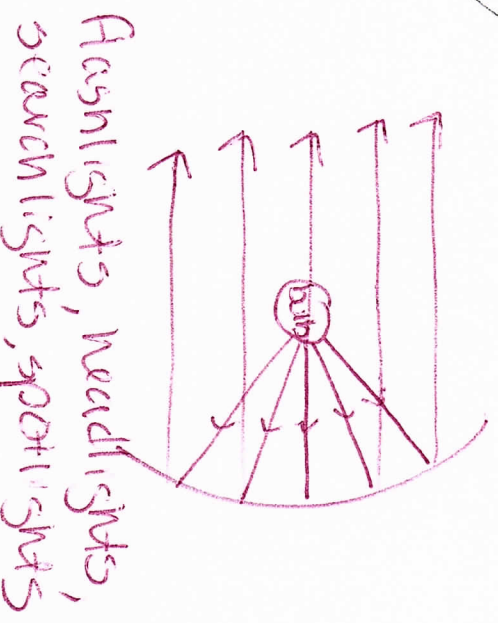
- * left & right reversed
- * brain traces the light rays back to where they would have come from if they had been straight
- * VIRTUAL IMAGE (not real)

Challenge #4 - Mirror (curved, 3-beam) CONCAVE

* used in reflecting telescopes
to "gather" light from space



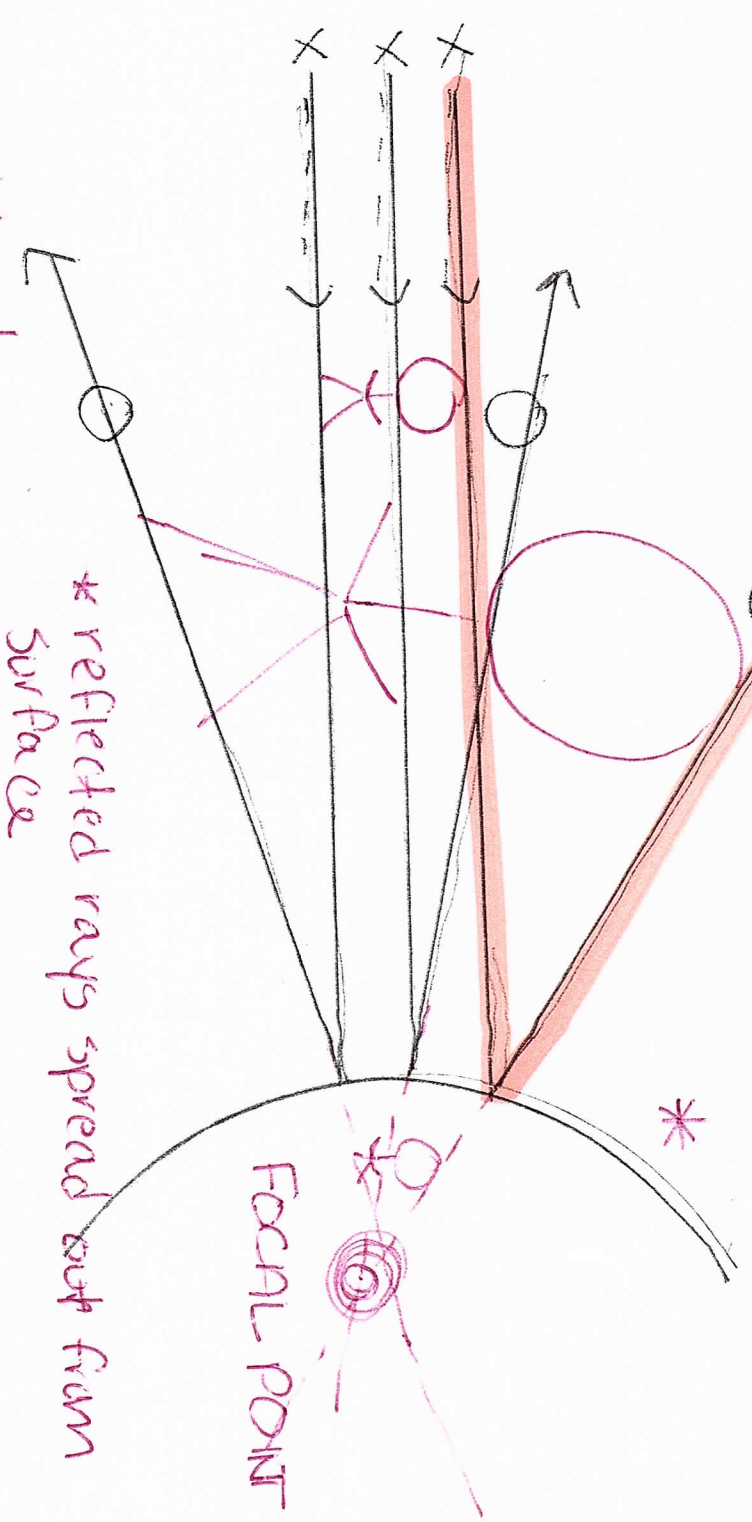
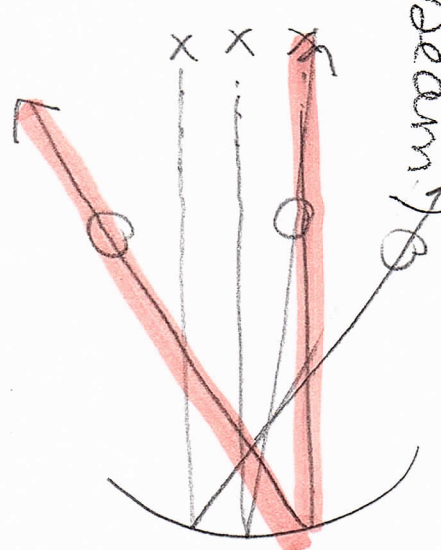
* Images formed by concave mirrors depend on the location of an object with respect to the focal point.



Challenge #5 - Mirror (curved, 3-beam) CONVEX

→ surface curves outward

* back side of a spoon



Problem!

image distorted

→ appear smaller,

so distance of system

* reflected rays spread out from surface

* image appears behind mirror VIRTUAL

* large areas of reflection (x's → car mirrors (side, rear view) → convex mirrors)