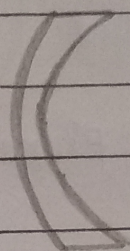
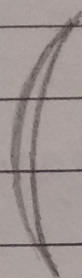


Q Differentiate between concavo convex lens & convexo concave lens. (2 points).

Concavo Convex Lens

Convexo Concave Lens



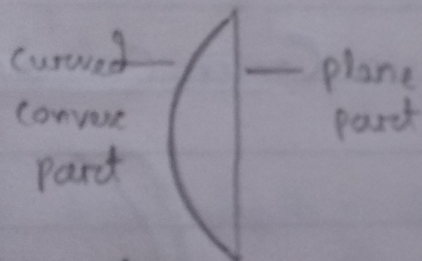
- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>* It is thinner at the edges &amp; thicker in the middle.</li> <li>* It is sharper at the edges.</li> <li>* It converges the light reflected on the surface.</li> </ul> | <ul style="list-style-type: none"> <li>* It is thicker at the edges &amp; thinner in the middle.</li> <li>* It is thicker at the edges.</li> <li>* It diverges the light reflecting at the surface.</li> </ul> |
|--|--|

Q What is the reason behind sparkling of diamond?

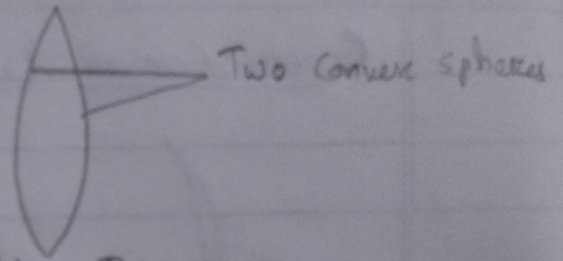
A The refractive index of diamond w.r.t air is 2.42.

- \* The sine value of critical angle is inversely proportional to the refractive index.
- \* With proper edges & cuts, large no. of rays of light will enter the face & undergo total internal reflection.
- \* Rather than refraction, when multiple no. of rays of light emerges out of the same face, it seems sparkling.

Q In which case the converging will be more, Biconvex or plano convex? Justify.



(a) plano convex



(b) Biconvex

Biconvex lens will have more converging power because it has two spherical faces whereas planoconvex has one spherical & one plane face.