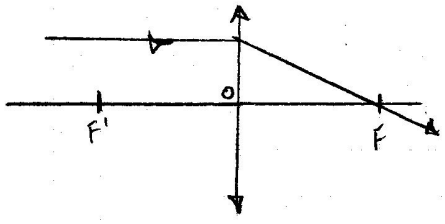
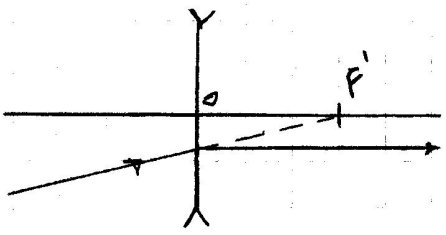
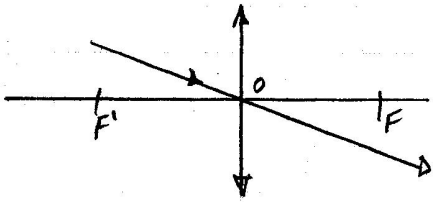
Dr. Bob

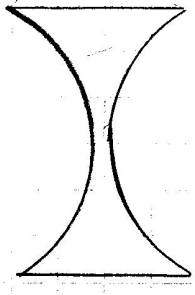
p. 105 Section 4.2

1.

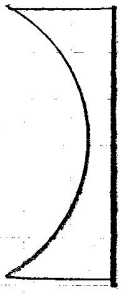
Ray Diagram	Type of ray	Converging / Diverging lens
	First principle ray.	Converging
	Second principle ray	Diverging
	Third principle ray	Converging.

2.

biconcave



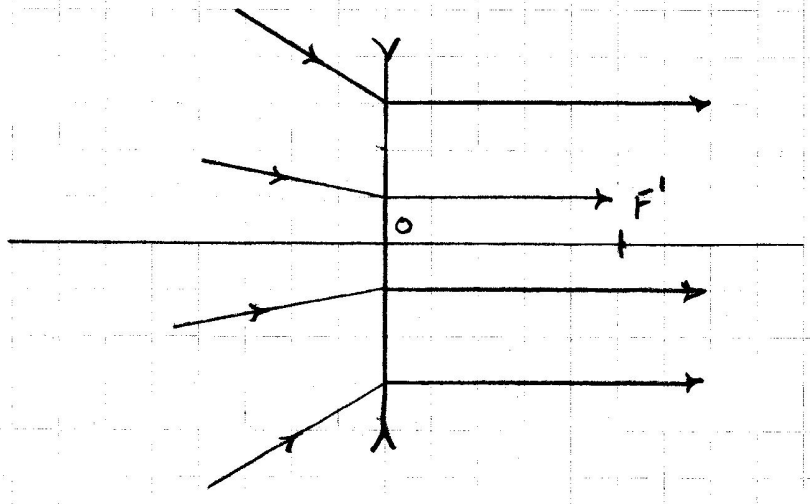
planoconcave



The biconcave lens has a greater difference in thickness between the center & the edges of the mirror than the planoconvex. Therefore, the biconcave will the deviate the light more.

3. ① Principle axis
② Secondary focal point, F'
③ lens
④ Optical centre, O
⑤ Principle focal point, F

4.



a) The lens is diverging
b) F' is called the secondary focal point.
c) The four rays are all examples of secondary principle rays pointing towards F' and exiting the lens parallel to the principle axis

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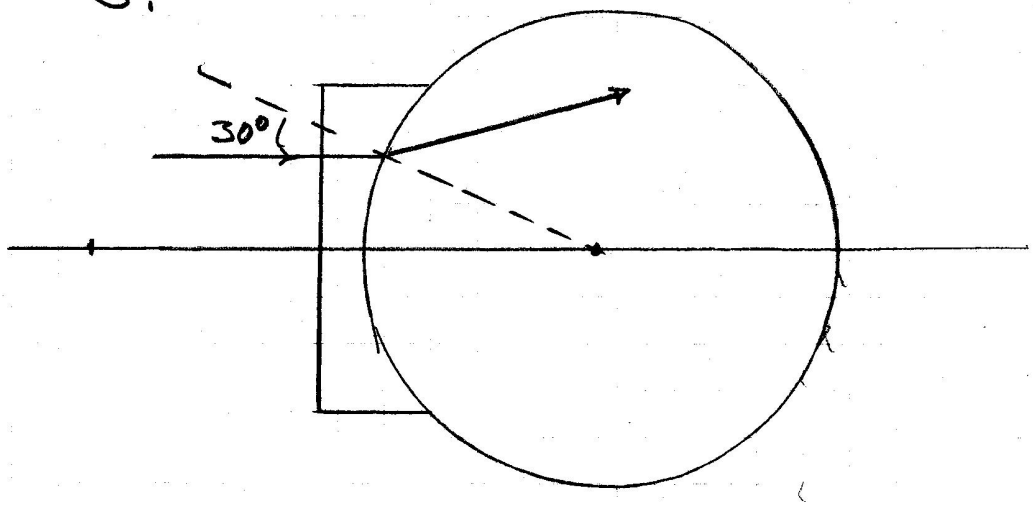
5.



a) Planoconcave, diverging lens.

b) The principle axis.

c) The ray would bend away from the normal.

d) The lens is diverging.