For the lens sketched on the back page, and considering the object to be on the left side, then:

a) Calculate the effective focal length, f.

b) Find the position of the image principal plane (H₂V₂).

c) Find the position of the object principal plane (V₁H₁).

d) Calculate the back focal length, b.f.l. = V₂F₁.

e) Calculate the front focal length, f.f.l. = F₀V₁

f) Locate in the Figure the front principal plane (H₁), the back principal plane (H₂), the object focal point, (F₀), and the image focal point (F₁).
$R_1 = 8 \text{ cm}$

$R_2 = 40 \text{ cm}$

$\eta = 2.0$

$\eta = 1.0$

$\eta = 1.0$

$V_1 \cdot V_2 = d = 4 \text{ cm}$