

P #31

Ch 23 - pg 743

c) $f = -20 \text{ cm}$ (diverging)
 $d_o = 10 \text{ cm}$

$$\frac{1}{d_o} + \frac{1}{d_i} = \frac{1}{f}$$

$$\frac{1}{(10 \text{ cm})} + \frac{1}{d_i} = \frac{1}{(-20 \text{ cm})}$$

$$(10 \text{ cm})^{-1} + d_i^{-1} = (-20 \text{ cm})^{-1}$$

$$d_i = -6.67 \text{ cm}$$

$$M = \frac{-d_i}{d_o} = \frac{-(-6.67 \text{ cm})}{10 \text{ cm}}$$

$$M = .67$$

Virtual,
Upright