

P #34

Ch 23 - pg 743

$$M = +2$$
$$S_o = 2.84 \text{ cm}$$

$$M = \frac{-S_i}{S_o}$$

$$\text{so } 2 = \frac{-S_i}{2.84 \text{ cm}}$$

$$S_i = -5.68 \text{ cm}$$

Find f :

$$\frac{1}{S_o} + \frac{1}{S_i} = \frac{1}{f}$$

$$\frac{1}{2.84} + \frac{1}{-5.68} = \frac{1}{f}$$

$$f^{-1} = 2.84^{-1} + (-5.68)^{-1}$$

$$f = 5.68 \text{ cm}$$