

OPTIKA – Zrcala

Konkavno zrcalo:

$$\frac{1}{a} + \frac{1}{b} = \frac{1}{f}, \quad M = \frac{S}{P} = \frac{b}{a}$$

→

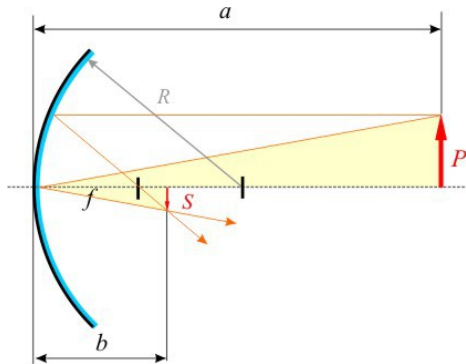
$$M = \frac{f}{a-f}$$

→

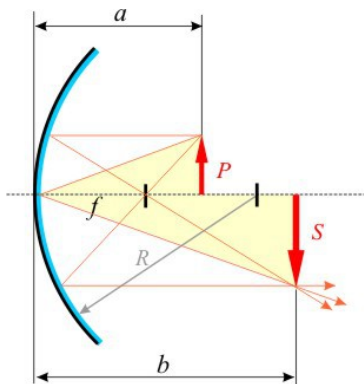
$$a = \frac{f(1+M)}{M}$$

$$f = \frac{R}{2}$$

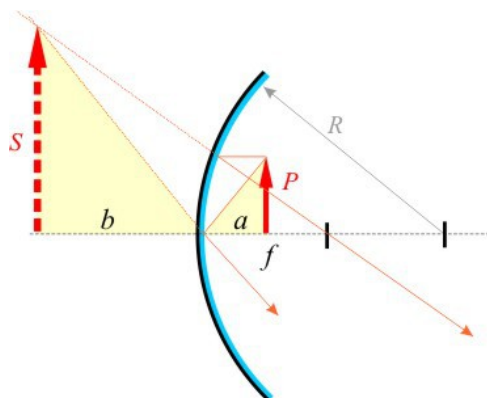
$a > R$
 $b < a$
 $S < P$
 $M = b/a < 1$



$f < a < R$
 $b > a$
 $S > P$
 $M = b/a > 1$



$a < f$
 $b < 0, |b| > a$
 $S < 0, |S| > P$
 $M < 0, |M| > 1$



Konveksno zrcalo:

$$\boxed{\frac{1}{a} + \frac{1}{b} = \frac{1}{f}} \quad \rightarrow \quad \boxed{M = \frac{S}{P} = \frac{b}{a}} \quad \rightarrow \quad \boxed{a = \frac{f(1+M)}{M}}$$

$$\boxed{f = -\frac{R}{2}}$$

$$b < 0$$
$$S < 0$$
$$M < 0, |M| < 1$$

