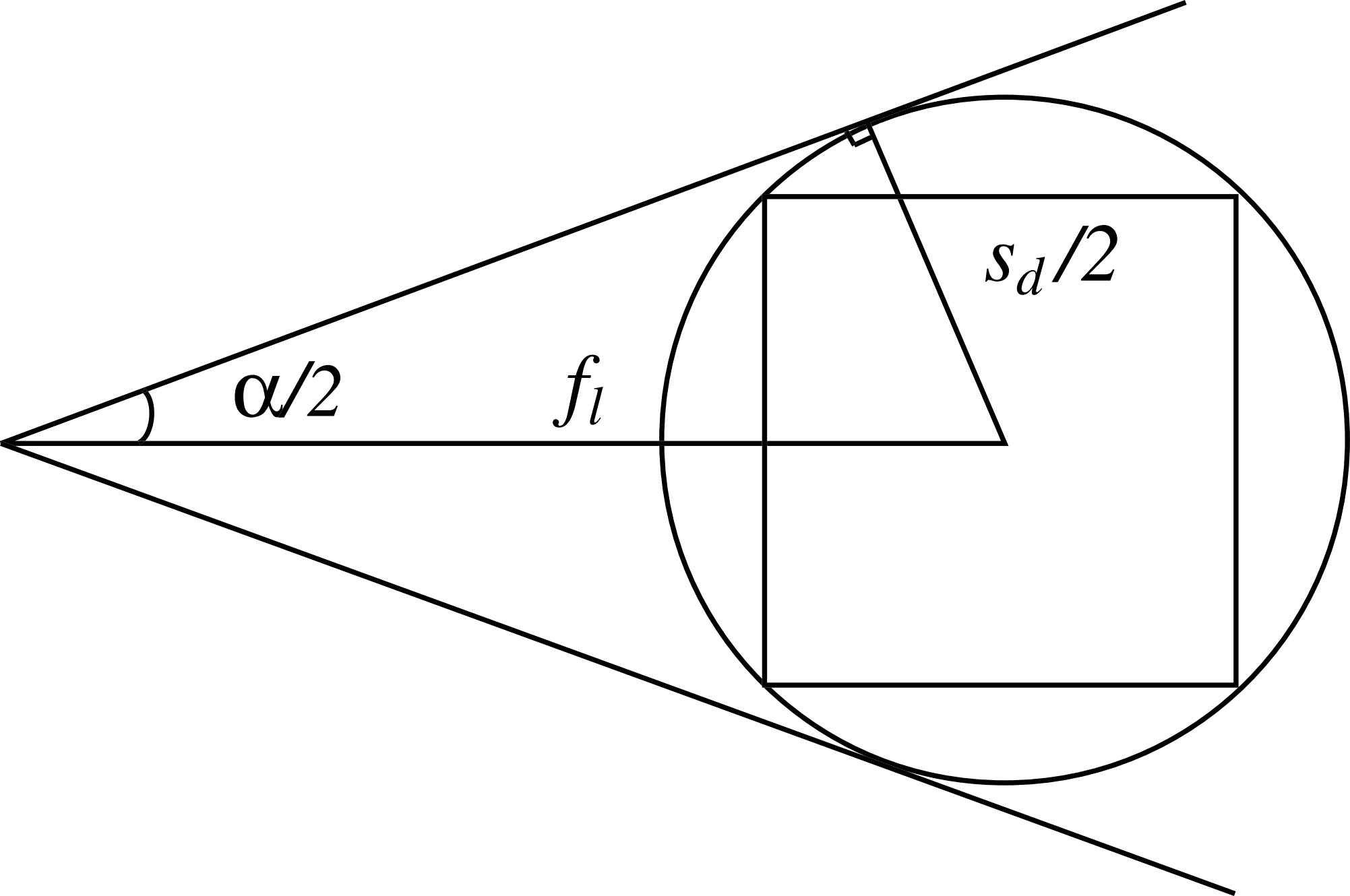
$s_d/2$
$\alpha/2$
f_l