[4.7 8]

$$2 > \left|\frac{z-2}{z+i}\right| = \frac{|z-2|}{|z+i|} = \sqrt{\frac{(x-2)^2+y^2}{x^2+(y+1)^2}}$$

$$4x^2+4(y+1)^2 > (x-2)^2+y^2 \rightarrow 4x^2+4y^2+8y+4 > x^2-4x+4+y^2$$

$$0 < 3x^2+4x+3y^2+8y \rightarrow 0 < x^2+\frac{4}{3}x+y^2+\frac{8}{3}y \Rightarrow \left(x+\frac{2}{3}\right)^2+\left(y+\frac{4}{3}\right)^2 > \frac{25}{9}$$

$\frac{5}{3}$ ומרכזו $\left(-\frac{2}{3},-\frac{4}{3}\right)$ [illegible]