

Exercício:

$$\operatorname{Re}(iz^2) = \operatorname{Re}(i(x+iy)^2)$$

$$= \operatorname{Re}(i(x^2 + 2xyi - y^2)):$$

$$= \operatorname{Re}(ix^2 - 2xy - iy^2) =$$

$$= \underline{-2xy}$$

$$\int_m \left(\frac{1}{z-1} \right) =$$

$$\int_m \left(\frac{1}{x+yi-1} \right) = \int_m \left(\frac{1}{(x-1)+yi} \right) =$$

$$\int_m \left(\frac{1/(x-1-yi)}{((x-1)+yi)(x-1-yi)} \right) =$$

$$= \int_m \frac{(x-1)-yi}{(x-1)^2+y^2} =$$

$$= \frac{-y}{(x-1)^2+y^2}$$