

Let  $z = x + iy$  denote the complex variable,  $\bar{z} = x - iy$  the complex conjugate of  $z$ , and  $f(z)$  a complex function. Evaluate  $\oint_C \frac{\bar{z}}{\bar{z} - i/2} d\bar{z}$  over  $C: |z| = 1$ . [100 台大機械 6(1)]

[解]  $\oint_C \frac{\bar{z}}{\bar{z} - i/2} d\bar{z} = \oint_C \frac{z}{z - i/2} dz$ , 在  $|z| = 1$  內無極點，積分值為 0



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