0.1 Line integral of the complex plane

$\int_C f(r)ds = \lim_{\Delta srightarrow 0} \sum_{i=0}^{n} f(r(t_i))\Delta s_i$

$\int_C f(r)ds = \lim_{\Delta srightarrow 0} \sum_{i=0}^{n} f(r(t_i))\frac{\delta r(t_i)}{\delta t}\delta r_i$

$\int_C f(z)dz = \int_a^b f(r(t_i))\frac{\delta r(t_i)}{\delta t}\delta r_i$