

$$K(w, \bar{w}, z, \bar{z}) = \frac{z\bar{w} + w\bar{z}}{w\bar{w}(z-w)(\bar{z}-\bar{w})} = \frac{1}{\bar{w}(z-w)} + \frac{2}{(z-w)(\bar{z}-\bar{w})} + \frac{1}{w(\bar{z}-\bar{w})}$$