

**Exercise 6**

Show that if  $\operatorname{Re} z_1 > 0$  and  $\operatorname{Re} z_2 > 0$ , then

$$\operatorname{Arg}(z_1 z_2) = \operatorname{Arg} z_1 + \operatorname{Arg} z_2,$$

where principal arguments are used.